extile bulletin

DECEMBER · 15 · 1946

Merry Christmas and a Happy New Year from the Staff of Textile Bulletin and Clark Publishing Co.

DVERTISING
DEX—PAGE 63

Know How . . .

The "Know How" is the principal ingredient of successful service in any trade, profession, business or industry.

More than fifty years of pioneering and developing specialized Group Insurance plans (now protecting more than one millon employees and dependents) has produced a staff of Home Office and Field representatives who KNOW HOW to best serve the insurance needs of the Textile Industry and its workers.

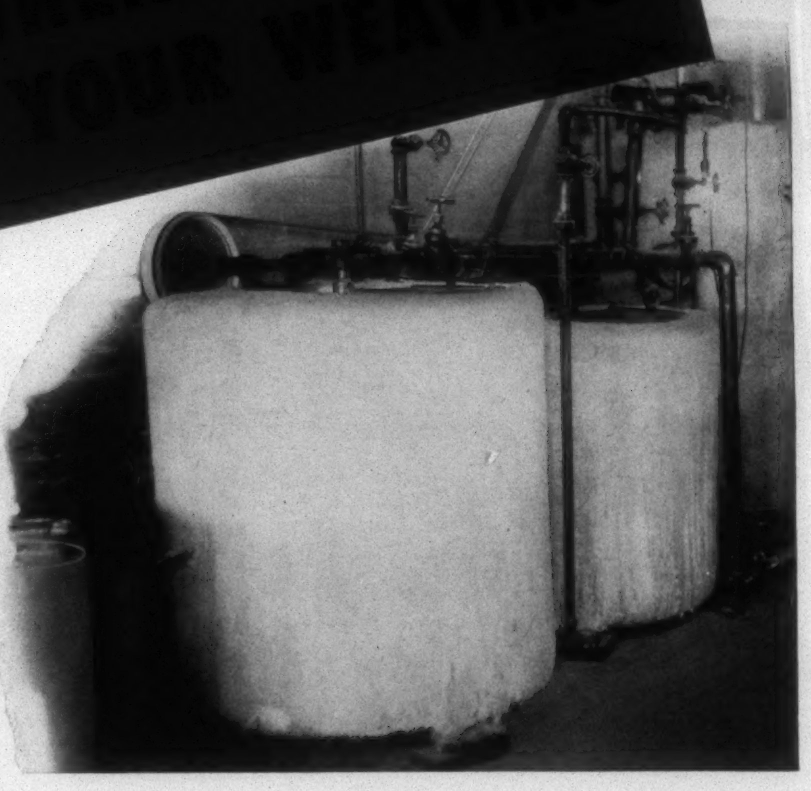
Their experience is yours for the asking—

PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY

Chattanooga

RESEARCH IN SOCIAL SCIENCE
BOX 539 JULY 41
CHAPEL HILL N C 2837 G

HERE'S WHERE YOU CAN
IMPROVE YOUR WEAVING



. . . by adding HOUGHTO-WAX to your sizing kettle! This size-builder meets a demand for better fibre lay, smoother warps and easier weaving. Add it to your regular size mixture (about 3 pounds per 100 pounds of starch) and note the improvement. Size Check-up tests we have made for mills showed superior warp strength, smoother warps and no loss of elasticity when HOUGHTO-WAX was added to the size formula. And results indicated less starch needed—an important item today. With HOUGHTO-SIZE softener and HOUGHTO-WAX you'll have a sizing combination that can't be beat. Write E. F. Houghton & Co., Philadelphia or Charlotte, for full data and costs on

HOUGHTO-Wax

Published Semi-Monthly by Clark Publishing Company, 218 W. Morehead St., Charlotte, N. C. Subscription $1.50 per year in advance. Entered as selond-class mail matter March 2, 1911, at Postffioce, Charlotte, N. C., under Act of Congress, March 2, 1897.

THIS IS NO. 60 OF A SERIES ON

GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation

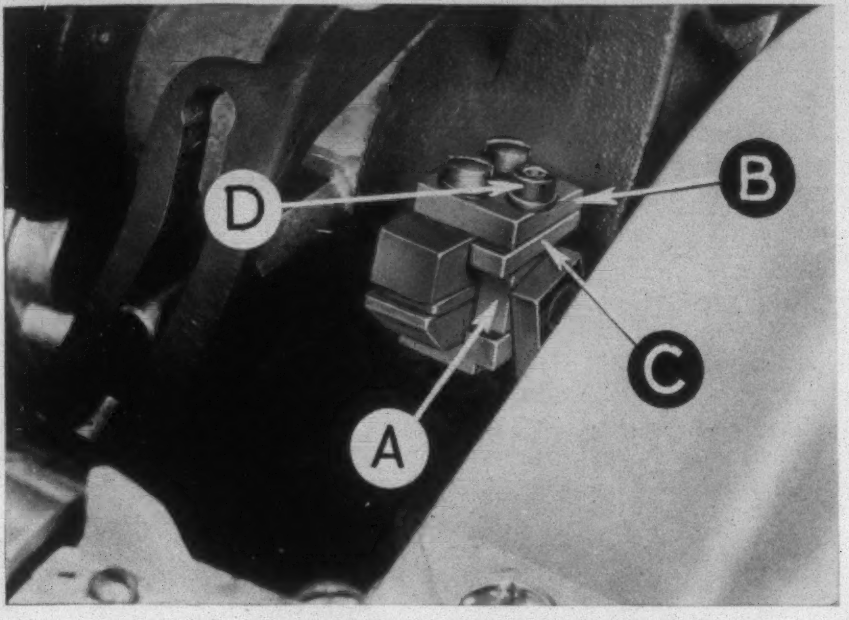


Fig. 1 New Spindle Holder Bearing Plate (44-278-3P3X)

NEW SPINDLE HOLDER BEARING PLATE (Roto-Coner*)

A new design of Spindle Holder Bearing Plate permits adjustment to compensate for wear in the Spindle Holder Bearing, Plates and Dashpot Link Stud Blocks. Such wear would otherwise allow play between the Upper and Lower Plates and the Link Stud Block (A) so that the Cone Holder would be free to bounce on the Rotary Traverse.

The new Plate is made in two parts, the Plate itself (B) and a Block (C) — held together by a screw (D) and washer. The contacting surfaces of the two pieces are milled at an angle of 7°, and the screw hole in the Plate (B) is elongated to allow the Block (C) to be moved along the angular surface. By means of this adjustment, the shoulder of the Plate can be increased so that it will take up the play and prevent bouncing.

WINDING COVERED ELASTIC YARN (No. 50 Winding Machine)

The Standard Pineapple Cone Attachment with Roller Bail is now being used to wind covered rubber yarn. As the package is contacted not by the Thread Guide but by the Roller Bail (A), density is reduced, and there is no scrambled yarn, so that knitting is better than from the ordinary package.

Minor changes are required in the Attachment. The inner leg of the Thread Guide (B) has an angular bend that projects over the outer leg, providing a lock to prevent the yarn rising too high in the Guide. A Bail (C), attached under the Clip Screws, is used to give the yarn direction to the Thread Guide.

Rubber yarn is nearly always wound from skeins and Compensator 90-935-30X is used. It is connected with the stopping mechanism of the machine and will stop the machine without breaking the yarn if a tangle occurs. Because of this fact it is advisable to use the Compensator even if winding overend.

Base tapers of cones vary from 29° to 40°, and tapers at the apex from straight front to 43°, according to the position of the screw in the cam.

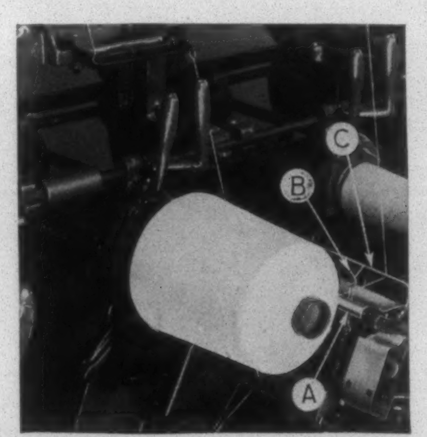


Fig. 2 No. 50 Winding Machine equipped for winding covered rubber yarn

NO. 44 TENSION BRACKETS USED ON NO. 60

All the advantages of the wide variety of Tension Brackets used on the Roto-Coner* (No. 44) are available for the No. 60 Winding Machine.

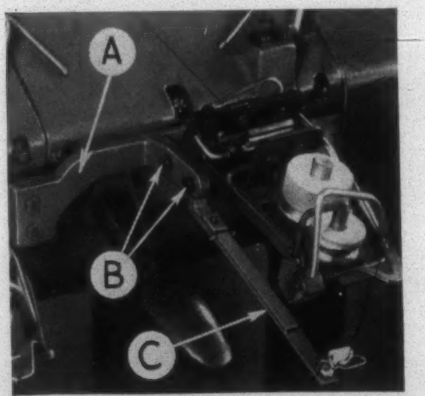


Fig. 3 No. 60 Machine equipped to accommodate No. 44 Tension Brackets

Tension Bracket Holder 60–1028–3X (A), attached to the frame at the left side of the spindle, is so designed that any of the No. 44 Tension Brackets can be mounted on it by two standard screws (B).

A special Breakage Lever 60–49–43 is used with this Holder.

With overend supply, the Supply Rod Bracket 60–144–7JAX is used. If the supply is from skeins overhead, a compensator 44–438–2CAXAA (C) is attached to the under side of the Tension Bracket.

The same Tension can be used on the No. 40 Machine by mounting a special Tension Bracket Holder 40–743–3 on the Tension Bracket Rod.

*Reg. U. S. Pat. Off. September 1946

See our Catalog in TEXTILE WORLD YEARBOOK
23.6.3

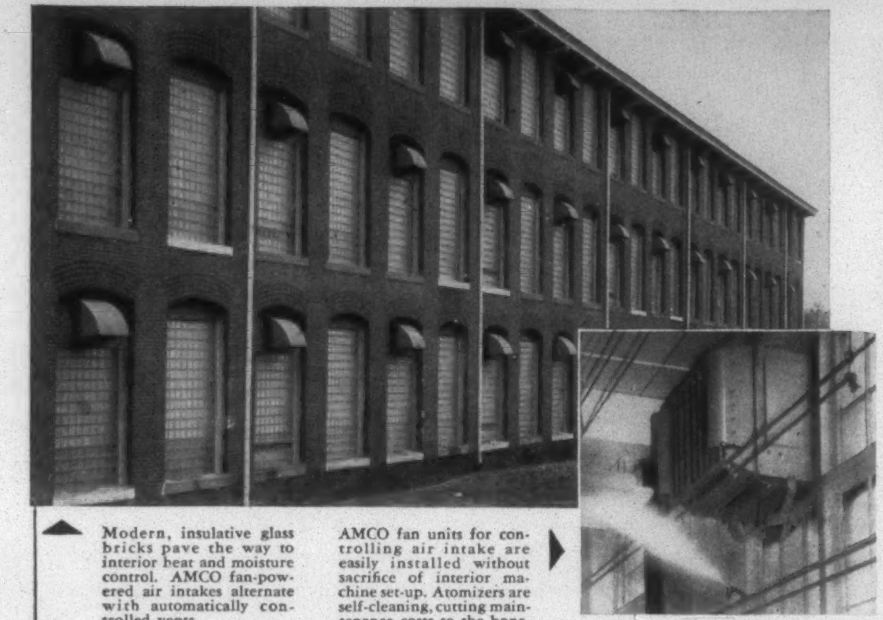
"THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED"

UNIVERSAL WINDING COMPANY

PROVIDENCE BOSTON PHILADELPHIA UTICA CHARLOTTE ATLANTA CHICAGO LOS ANGELES MONTREAL and HAMILTON

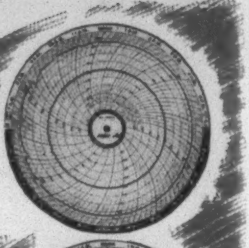
Here's Amco Humidification and Cooling

AT ITS SIMPLE AND EFFICIENT BEST!

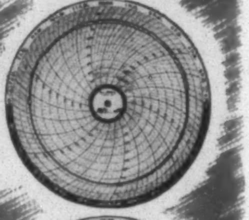


Modern, insulative glass bricks pave the way to interior heat and moisture control. AMCO fan-powered air intakes alternate with automatically controlled vents.

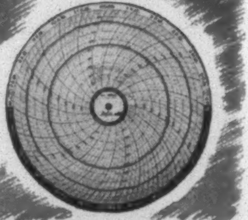
AMCO fan units for controlling air intake are easily installed without sacrifice of interior machine set-up. Atomizers are self-cleaning, cutting maintenance costs to the bone.



Card Room Chart: Temperature holds around 85° and relative humidity at 50%.



Weave Room Chart: Temperature and relative humidity almost coincide at 80.



Spinning Room Chart: Temperature 85° and relative humidity at 52%.

KNOWING that the reduction of excessive temperature and the holding of humidity at correct levels are essential to efficient production and worker health and comfort, Marion Manufacturing Company took action – had an AMCO Evaporative Cooling System installed – and got accountable results. The three charts from separate plant departments provide a graphic record of the ideal conditions maintained by the AMCO system.

No rambling duct lines are necessary with AMCO. Relative humidity is precisely maintained by introducing atomized water spray, and the frictional heat of high speed machines is absorbed by evaporation of the moisture in conjunction with carefully controlled air-flow.

An AMCO engineer will be glad to show you how, with this system, you can modernize your plant simply and economically to get greater speed and output that pays profits in these competitive times.

FEATURES OF AMCO HUMIDIFICATION AND COOLING

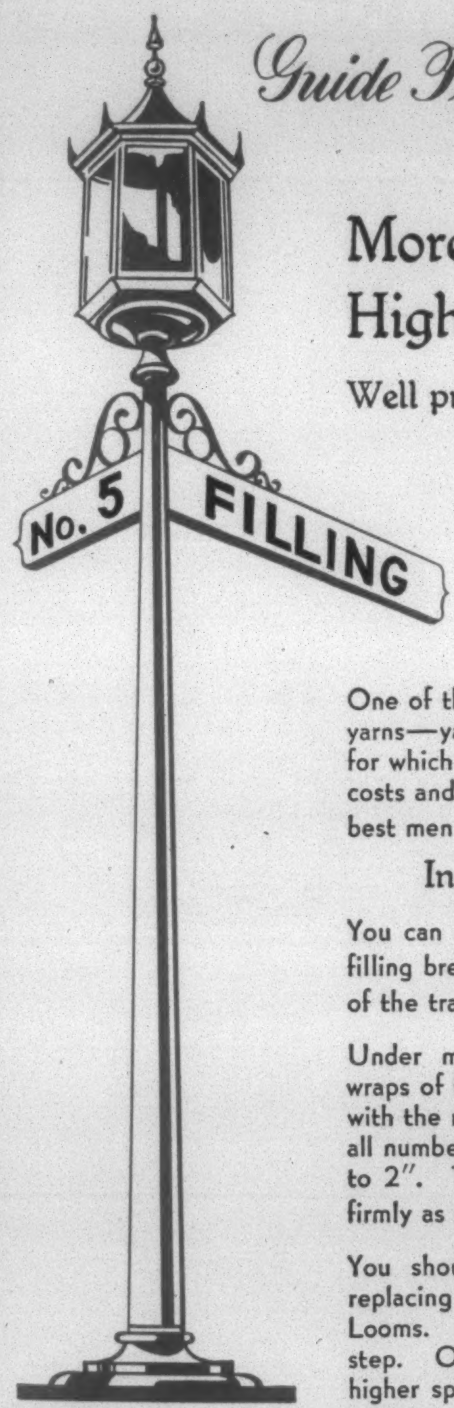
- Reduces excessive temperature and holds relative humidity at point best suited to fibre and process.
- Speeds production in high friction (heat) areas.
- Assures evener yarn counts and increases breaking strength.
- Gradually increases regain for good roving and consequent better spinning.
- Drafting of fibres smoother and more compact.
- Waste and fly greatly reduced.
- No cumbersome ducts to require cleaning and obstruct light.
- Easier to install – minimum disruption.
- High flexibility to meet changing room conditions.
- Minimum maintenance.
- Amco Evaporative Cooling utilizes your present humidification system.
- Increases worker comfort.

AMCO

HUMIDIFICATION and COOLING

AMERICAN MOISTENING CO. AFFILIATED WITH GRINNELL COMPANY, INC., PROVIDENCE, R. I. • BOSTON • ATLANTA • CHARLOTTE

Guide Posts to Increased Production



More Production with High Grade Yarns

Well prepared filling gives you

More and Better Cloth
Lower Weaving Costs

Production standards in your weave room cannot be maintained if the filling has too many slubs, knots, or imperfections caused by poor piecing. Your filling must be conditioned to weave off cleanly.

One of the vital factors in weave room efficiency is well prepared yarns—yarns that allow you to run your looms at the High Speeds for which they are designed. Weak filling increases your weaving costs and makes more work for the weaver. Assign one of your best men to

Inspect the Filling at Frequent Intervals.

You can often reduce or eliminate slough-offs—fertile source of filling breaks—by a change in the build of the filling or the length of the traverse.

Under most conditions you will obtain the best results if the wraps of filling on the bobbin have a ratio of approximately 3 to 1 with the ring rail moving up slowly and down fast. On practically all numbers of filling the length of traverse should be from 1-3/4″ to 2″. The filling should be spun or wound on the bobbin as firmly as possible.

You should give serious consideration to bobbin design when replacing older units with our up-to-date High Speed X Series Looms. You need new style bobbins with the non-slough feeler step. Old bobbins may prove to be entirely inadequate for higher speeds. We can help you in the selection of the correct bobbin.

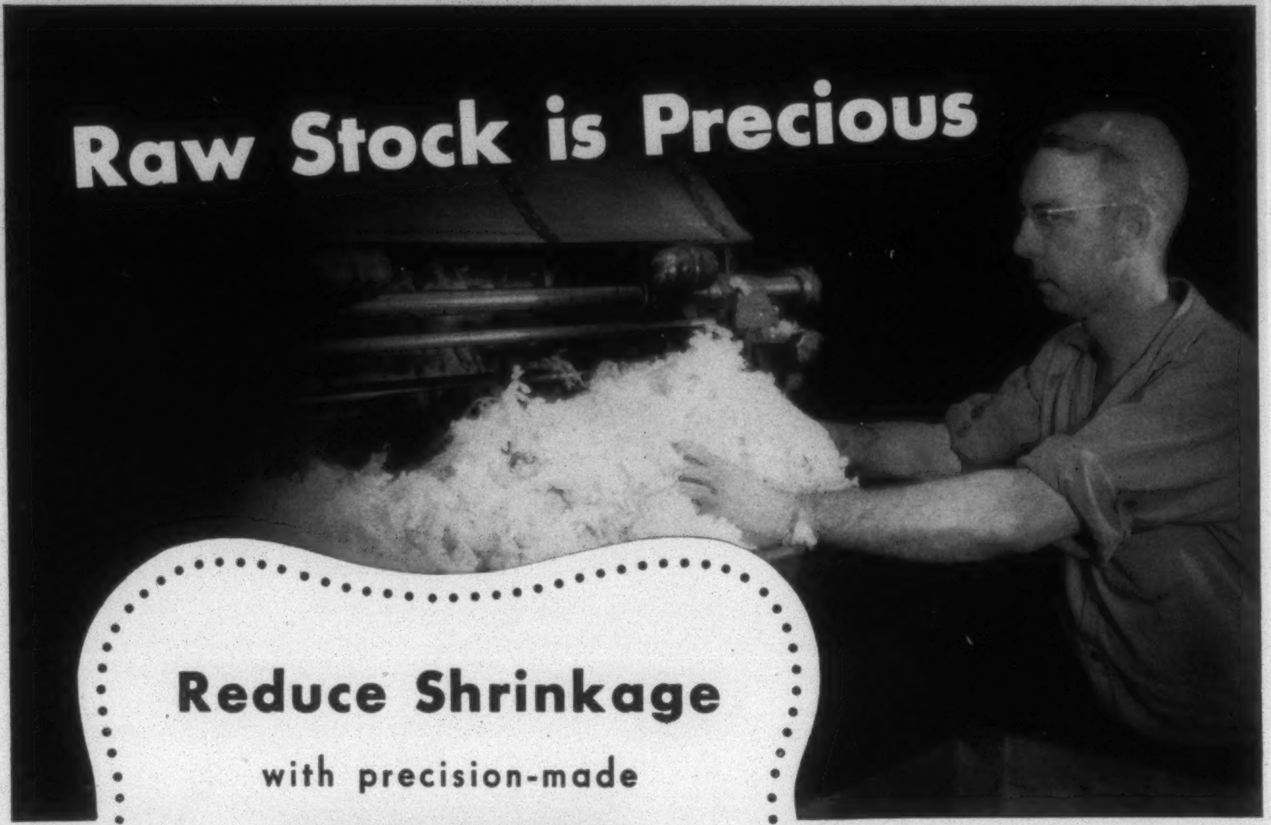
Do not limit your success by holding
to previously accepted standards.

Fifth in a Series

Of What Well-Managed Mills
Are Doing to Get the Best
Results in Weaving

DRAPER CORPORATION
HOPEDALE MASSACHUSETTS

Raw Stock is Precious



Reduce Shrinkage

with precision-made

TUFFERIZED CARD CLOTHING

IF YOUR card clothing is worn, or ground down so it does not give the proper carding action *your losses in raw stock may be serious.*

Tufferized Card Clothing, properly operated, will reduce these losses and convert them into strong, uniform yarns.

Have a Howard representative examine your card clothing. He will help you determine whether waste is excessive and make suitable recommendations.

TUFFER PRODUCTS

Card Clothing for Woolen, Worsted, Cotton, Asbestos and Silk Cards • Napper Clothing, Brush Clothing, Strickles, Emery Fillets. Top Flats Recovered and extra sets loaned at all Plants. Lickerins and Garnet Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant • Midgley Patented, and Howard's Special Hand Stripping Cards • Inserted Eye & Regular Wire Heddles

HOWARD BROS. MFG. CO.

WORCESTER, MASSACHUSETTS

Southern Plants: Atlanta, Ga., Gastonia, N. C. **Branch Offices:** Philadelphia, Pa., Blanco, Tex. **Canadian Agents:** Colwool Accessories, Ltd., Toronto 2

Double Appeal

WOOL { **Styled by Crestlee**
Shrinkage-controlled with *Lanaset** **RESIN**

Here's double value now being offered to the consumer. It's a Crestlee design in winter white, done in wool that has been treated with LANASET* Resin—for lasting *washability!* And what could have stronger consumer appeal than white wool that can be hand washed repeatedly with no risk of appreciable shrinkage!

LANASET Resin is now proving itself in sportswear and other apparel offered by leading stores. Why not let it give your woolens the potent sales appeal of washability? Our Technical Staff will gladly advise you on its application.

AMERICAN CYANAMID COMPANY
TEXTILE RESIN DEPARTMENT
BOUND BROOK, NEW JERSEY
New York • Boston • Philadelphia
Providence • Charlotte • Chicago

LANASET RESIN • SHEERSET* RESIN • AEROTEX† SOFTENER H • LACET† RESIN*

**Reg. U. S. Pat. Off. †Trade-mark of American Cyanamid Company*

An Actual Case

(FROM THE FILES OF MEINHARD, GREEFF & CO., INC.)

During the war, a well-known selling agency sacrificed the civilian markets for patriotic reasons and sold millions of dollars of woolen piece goods and blankets to the Army and the Navy.

When the war was over, this enterprising outfit had the idea that it could convert the olive-drab and navy-blue surplus into colorful, useful, and salable fabrics for the hungry civilian market. However, the Government demanded cash for the delivery of these materials and so these men who were well known to Meinhard, Greeff, came and presented the problem.

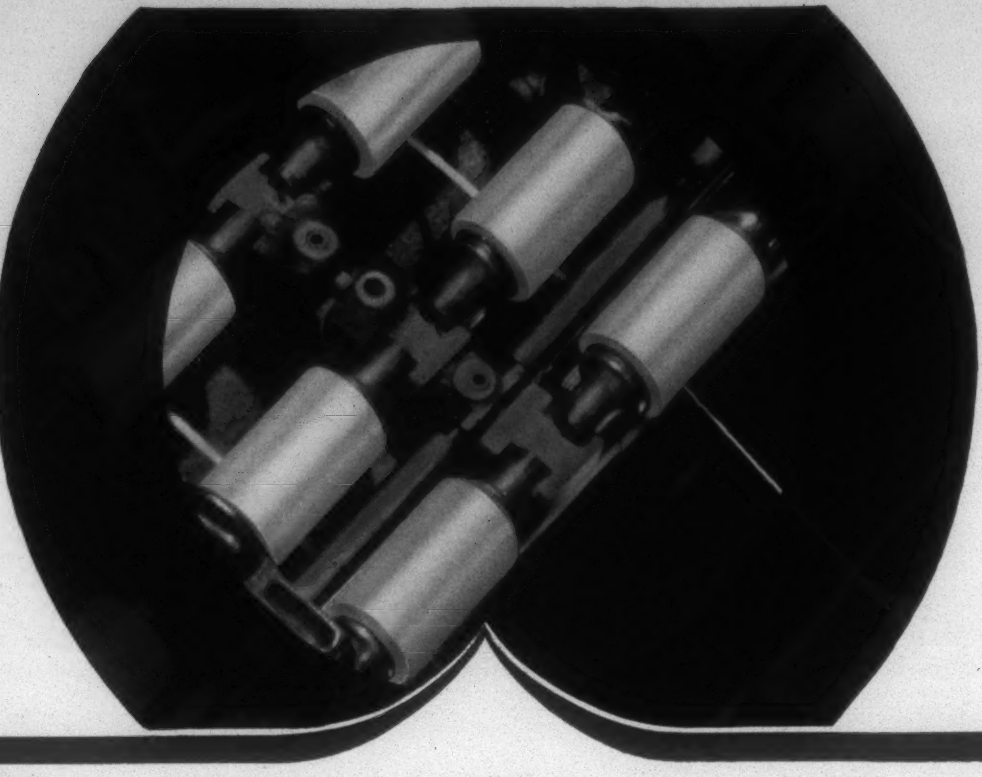
Sensing the usefulness and timeliness of this operation, and with great confidence in the ability of this concern, Meinhard put up the cash as the Government required. In fact by April, 1946, a million and a quarter dollars of Meinhard's money was tied up in these materials as they were being reprocessed. By October, woolen materials worth $3,000,000 had been recolored, restyled, and sold to the civilian market, and Meinhard was paid back.

This is another example of Meinhard's adaptation to times and conditions, and their response to the enterprise of their clients—based on common sense, not iron clad dictum.

Meinhard, Greeff & Co., Inc.

FACTORING FOUNDED ON SERVICE

51 MADISON AVE., NEW YORK CITY
ASHLAND 4-7885



Consider THIS FACT FOR A MOMENT...

HERE ARE IMPORTANT REASONS WHY YOU SHOULD USE DAYCOS

- Large reduction of ends down.
- More foreign elements removed from yarn.
- Specially compounded for uniform wear, lengthening service life.
- Equally effective for special types of synthetic and synthetic blends of yarn.
- Decreases flying lint in spinning room.
- Not affected by temperature changes.
- Oil resisting and static free.
- No grooving—less ends down.
- Easy to apply.

Whether your frames are equipped with flat clearers or revolving clearers, there is a specially engineered Dayco Roll Covering designed to give you greater uniformity of yarn and increased production.

Dayco Roll Coverings do this because they have ideal cushion, exactly the right coefficient of friction and are unaffected by humidity changes or temperature extremes throughout an exceedingly long life. Their surface is so tough that it never grooves, hollows out, flattens or distorts. Since Daycos are static free, lapping up is practically unknown.

Daycos lower your costs, too, because accurate accounting records have proved that the cost-per-hour of operation with Dayco Roll Coverings is definitely less.

Check the nine advantages listed at the left which you get with Dayco Roll Coverings. Then let us prove these specially engineered cots can help you raise both your quality standards and your production curve. Write today for complete information.

THE DAYTON RUBBER MANUFACTURING COMPANY
DAYTON 1, OHIO • MAIN SALES OFFICE: GREENVILLE, S. C.

Dayton Rubber

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

FOSTER MODEL 102
FOR PACKAGE DYEING

PERFORATED TUBE PACKAGE

SPRING TUBE PACKAGE

Typical Packages Wound at High Speed

A package dyer's production is limited to a large extent by the capacity of his winding department. Hence it is important for him to get maximum winding production with minimum investment, low operating cost and few repairs.

Foster Model 102's in the package dyeing industry are regularly running at high speed, giving twice the production of obsolete winding machines with a reduction in operating cost of 33 1/3%. Repair costs are also low, — as little as $3.50 per year per 100 spindle machine in many cases.

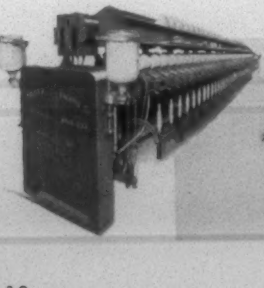
DYEING QUALITY MAINTAINED

With all these savings there is no sacrifice in package "dyeability". In fact the trend among dyers using Model 102's is toward larger and larger packages without loss in penetration or levelness. That's because the drum wind gives uniform yarn speed and therefore uniform package density.

ECONOMY FEATURES INCLUDE —

— self threading tension and slub catching attachment. Automatic size stop motions, which stop package at any predetermined diameter, eliminating hand gauging. Flexibility (angle of wind easily changed and machine may be readily equipped for cone winding if desired.)

Bulletin A-95 on request.



FOSTER MACHINE CO., Westfield, Mass., U. S. A.

Southern Office: Johnston Bldg., Charlotte, N. C.; Canadian Representative, Ross-Whitehead & Co., Ltd.,
University Tower Bldg., 660 St. Catherine St., West, Montreal, Quebec

Color

NOW AS EVER . . . THE MASTER SALESMAN

APPEALING to the emotions, color is more persuasive than a thousand words. All races, all ages respond to it. In the case of textile "convenience items", such as suspenders, garters and belts, particularly, it is almost always the deciding factor in a sale.

With an experience of 36 years in yarn dyeing, Franklin Process can help you to select your colors wisely, from a manufacturing as well as a merchandising standpoint. Service in other respects is also outstanding, for we can deliver from four separate plants, if necessary, with a capacity of over 800,000 lbs. a week.

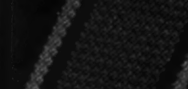
In any case color quality will be uniform for all plants use identical formulas for standard shades and the same type of dyeing equipment.

Franklin Process

LARGEST PACKAGE DYERS IN THE WORLD

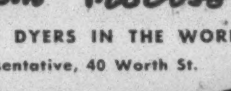
New York Representative, 40 Worth St.

PROVIDENCE

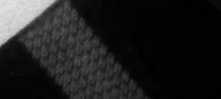


PHILADELPHIA

GREENVILLE



CHATTANOOGA



"what!
you mean
I can't buy all
the Soda Ash
I want?"
YES, MR. INDUSTRIALIST, that's the situation
on Soda Ash . . . as long as present heavy
and small, with little or no occasion for late deliveries or other disappointments . . . regrets only that its production facilities have not been great enough at all times to serve all potential Mathieson customers.
Yes, Mr. Industrialist, if they ever start pin-
will sport a chest full!
able to buy all
unfortunately,
that's still true

The demand for Soda Ash—as well as the demand for Caustic Soda, Bicarbonate of Soda and Liquid Chlorine—continues to be far greater than the supply; in fact, the situation is even more critical than in May, 1945 when the above advertisement appeared.

Mathieson
CHEMICALS

Caustic Soda . Soda Ash . Bicarbonate of Soda
Liquid Chlorine . Chlorine Dioxide . Ammonia,
Anhydrous & Aqua . HTH Products . Fused Alkali
Products . Synthetic Salt Cake . Dry Ice . Carbonic
Gas . Sodium Chlorite Products . Sodium Methylate

The Mathieson Alkali Works (Inc.)
60 East 42nd Street, New York 17, N. Y.

DURABLE WATER REPELLENCY at Low Cost

WITH

REPEL-O-TEX

HERE is DURABLE water repellency that can be applied to any properly prepared cotton, rayon or wool fabric with no extra handling in the mill. Repel-O-Tex-treated fabrics require no curing, washing or after-treatment. They can be handled in the normal manner. This means DURABLE water repellency at no greater cost than is produced by ordinary fugitive water-repellent finishes.

Fabrics treated with Repel-O-Tex D3 and D4 conform to normal low temperature washing tests and to dry cleaning tests. Spray ratings of 100 are obtained after treatment, and of 70 or better after three dry cleanings or three washings. What's more, treated fabrics are also stain and perspiration resistant.

By varying mixtures of Repel-O-Tex D3 and D4 in any required proportion, you get not only DURABLE effective water repellency, but also any desired hand or finish.

For such low cost improvement in DURABLE water repellency and finish . . . more merchandising appeal . . . investigate Repel-O-Tex.

ONYX OIL & CHEMICAL COMPANY

JERSEY CITY 2, N. J.

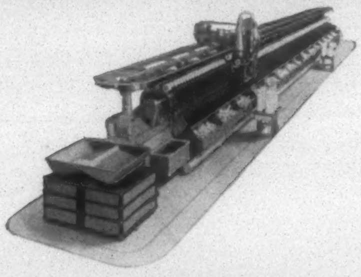
CHICAGO • PROVIDENCE • CHARLOTTE • ATLANTA • LOS ANGELES

In Canada: ONYX OIL & CHEMICAL CO., LTD.—MONTREAL, TORONTO, ST. JOHNS, QUE.

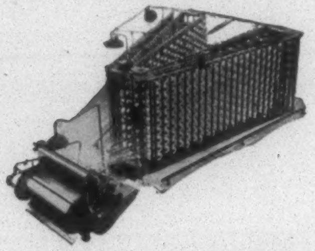
For Export: ONYX INTERNATIONAL, JERSEY CITY 2, N. J.

onyx CHEMICALS FOR DYEING AND FINISHING

MOST AMERICAN COTTON MILLS HAVE ADOPTED THE BARBER-COLMAN SYSTEM OF SPOOLING AND WARPING



AUTOMATIC SPOOLER

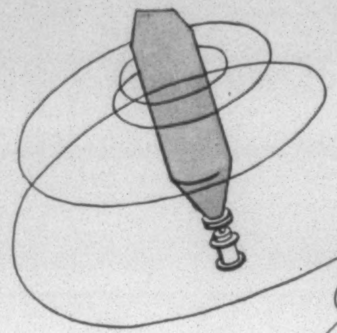


SUPER-SPEED WARPER

About twenty-five years ago the first Barber-Colman Spoolers and Warpers were installed in a prominent American mill. These new machines aroused immediate interest among mill executives all over the country, because they offered advantages of economy and operation not previously attainable. Not only was the yarn handled at far greater speeds than before, but its condition was maintained to a much higher degree. Savings were achieved and production improved in the succeeding processes . . . slashing and weaving . . . as well as in the spooling and warping. Each mill that considers Barber-Colman equipment receives a detailed Proposal, based on a careful analysis of the mill's own requirements, which shows accurately how much money the machines will save and how soon they will pay back the investment in them. Through the years improvements have been introduced to increase the efficiency and performance of the equipment. All these distinctive features have gained for the Barber-Colman System of Spooling and Warping outstanding recognition . . . to the end that practically all American cotton mills have "standardized" on Barber-Colman equipment.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY
ROCKFORD • ILLINOIS • U. S. A.
FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND



Less wear

Greater efficiency

Lower maintenance costs

Reduced fire hazard

when the Gulf Lubrication Engineer is *"in the picture"*—

The Gulf Lubrication Engineer in the picture (left) is checking loom lubrication in a prominent New England mill.

GULF LUBRICATION ENGINEERS are specialists in scientific textile mill lubrication. That's why they are "in the picture" in a majority of leading mills, co-operating closely with production and maintenance men to attain better all-round efficiency.

By recommending the proper oils and greases for every moving part, and the best methods of application, Gulf Lubrication Engineers help to lessen wear, reduce fire hazard, improve output, and cut maintenance and power costs.

Call in a Gulf Lubrication Engineer today and let his knowledge and experience work for you on your maintenance problems. His helpful counsel—and Gulf's complete line of more than 400 quality oils and greases—are available to you through 1200 warehouses located in 30 states from Maine to New Mexico. Write, wire, or phone your nearest Gulf office.

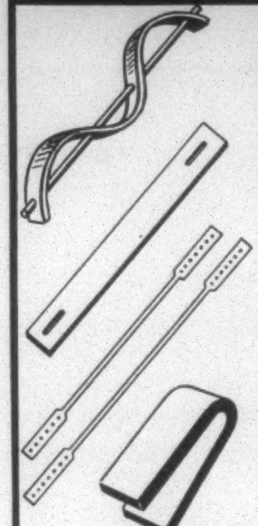
Gulf Oil Corporation · Gulf Refining Company

Division Sales Offices:

Boston · New York · Philadelphia · Pittsburgh · Atlanta
New Orleans · Houston · Louisville · Toledo

GULF INDUSTRIAL LUBRICATION

PAGE TEXTILE LEATHERS



SPINDLE BUMPERS
From the finest obtainable Leather.

CHECK STRAPS
Made from the finest Hair-on leather.

HARNESS STRAPS
Made from selected Hair-on leather.

LUG STRAPS
Strong, long wearing, Economical.

MISCELLANEOUS LOOM LEATHERS

PAGE BELTING CO.
CONCORD, N. H., U. S. A.

WENTWORTH

Double Duty **Travelers**

Reg. U. S. Pat. Off.

HICKS — AMERICAN — WILSON — U. S. STANDARD

Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH
A NEW CHEMICAL TREATMENT

Manufactured only by the

NATIONAL RING TRAVELER CO.
PAWTUCKET, R. I.
131 W. First St., Charlotte, N. C.
L. EVERETT TAYLOR, So. Agent

TEXTILE PROCESS COMPOUNDS

MINOTINTS

Oil-base fugitive tints for all synthetic and natural fibers.
Identification – Lubrication – Conditioning

RAYON OILS
TINTINOLS
LYNOL

SS BASE OIL
MINEROL
MEON

BRETON OILS FOR WOOL

BORNE SCRYMSER COMPANY

Offices and Works
ELIZABETH, N. J.

Established 1874

Southern Warehouse
CHARLOTTE, N. C.

A GREAT TEXTILE SELLING ORGANIZATION

SELLING AGENTS

ISELIN-JEFFERSON

COMPANY, INC.

90 WORTH STREET, NEW YORK CITY

CHICAGO • BOSTON • PHILADELPHIA • ATLANTA • ST. LOUIS

William Iselin & Co., Inc., Factors

Jarrett's
TRADE MARK

TO OUR FRIENDS THROUGHOUT
THE TEXTILE SOUTH

Sincere Wishes for a
Merry Christmas
and a
Happy New Year

★

CECIL H. JARRETT & CO.
P. O. Box 647 • NEWTON, N. C. • Phone 154

LAMBETH PRODUCTS
FOR SPINNING, TWISTING, SPOOLING, WEAVING

Basket weave spinning tape
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"BILTRITE" CANVAS LUG STRAP
(PATENTED)
Basket weave twister & spooler tape
Double loop hook bands for cards, twisters, spoolers, etc. (all lengths and diameters)
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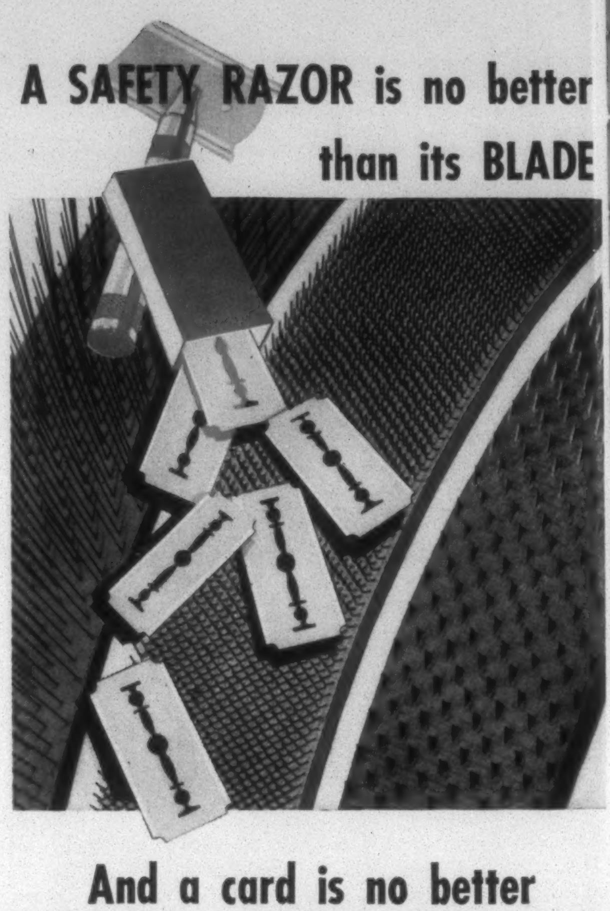
A SAFETY RAZOR is no better than its BLADE



And a card is no better than its CLOTHING

Your face tells you that your safety razor needs a new blade, but the stock in a card can't complain about the condition or the suitability of the clothing you are using. Eternal vigilance in the card room is your only guarantee of efficiency and Ashworth service men can be of great help to you in this respect. They know from experience which is the best clothing for the purpose. They can also, if you desire, inspect your cards at regular intervals, free of charge, and recommend a repair program which will involve minimum expense and minimum loss of productive time.

ASHWORTH BROS., INC.
AMERICAN CARD CLOTHING CO. (Woolen Div.)

Fall River*†‡ Worcester*‡ Philadelphia*†‡ Atlanta†‡
Greenville†‡ Charlotte †‡ Dallas†‡ (Textile Sply. Co.)
**Factory* *†Repair Shop* *‡Distributing Point*

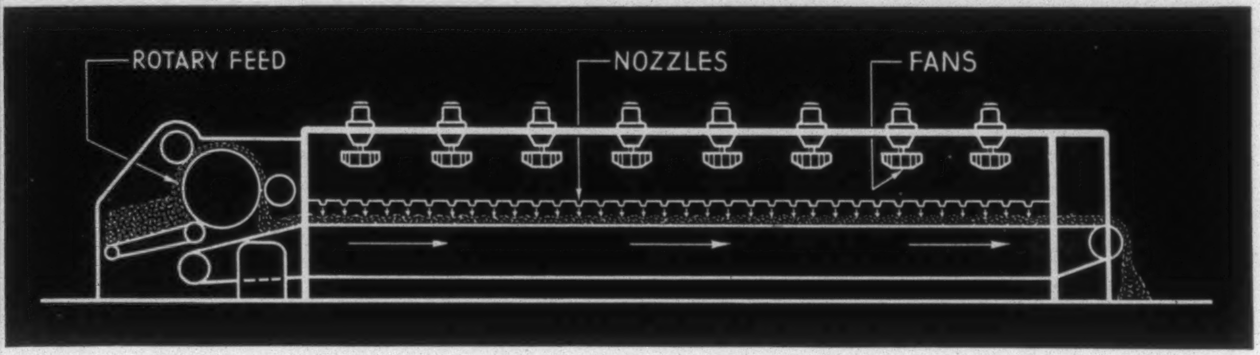
PRODUCTS AND SERVICES — CARD CLOTHING FOR COTTON, WOOL, WORSTED, SILK, RAYON AND ASBESTOS CARDS AND FOR ALL TYPES OF NAPPING MACHINERY • BRUSHER CLOTHING AND CARD CLOTHING FOR SPECIAL PURPOSES • LICKERIN WIRE AND GARNET WIRE • SOLE DISTRIBUTORS FOR PLATT'S METALLIC WIRE • LICKERINS AND TOP FLATS RECLOTHED.

Ashworth PIONEERS IN CARD CLOTHING

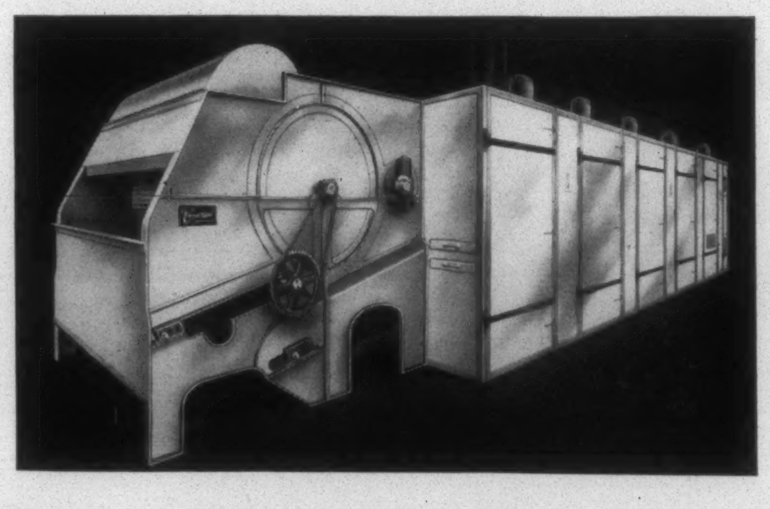
3 FACTORIES . . . 6 REPAIR SHOPS . . . 7 DISTRIBUTING POINTS

"*Breathing Action*" OF IMPACT PRINCIPLE

ASSURES THOROUGH, UNIFORM STOCK DRYING



The patented features of design that make possible the "breathing action" of Proctor impact drying, assure you the best possible results when it comes to drying cotton or wool stock or other fibrous materials. Stock dried in the Proctor impact type dryer is carried through the drying chambers on either a woven wire or perforated metal plate continuous conveyor. Heated air, at high velocity, is intermittently impinged against the bed of stock on the conveyor as it moves through the dryer. As the material is subjected to the impingement of air, it compresses and as it passes between one jet of air and the next, it expands, in a breathing-like action, as can be seen from the longitudinal view above. This movement—or "breathing action"—permits heated air to circulate all the way through the bed of material and promotes the uniform, thorough and rapid drying possible with this Proctor impact system. The temperatures within the dryer, as well as the velocity of the air circulation to which the stock is subjected, can be varied to suit the particular requirements of the material being dried. Considered from every angle, impact drying, with its "breathing action", is the ideal method for the correct drying of fibrous materials. If stock drying is a part of your plant operation, write today, telling us as much about your problem as possible. Our engineers will gladly show you how the Proctor impact dryer can fit into your production line.



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Looking to the future
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Ray Chemical Co.
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CHEMICALS
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Our **SERVICE** Backed by Years of Experience
—enables us to give you the BEST in the

MANUFACTURE OF
Steel Rolls
Flyer Pressers
Card Room Spindles
Lifting Rods

REPAIR OF
Steel Rolls
Roving Spindles
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OVERHAULING OF
Fly Frames
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Spoolers

MOVING OF
All Kinds of Textile Machinery

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SPINDLE & FLYER CO., Inc.
WE MANUFACTURE, OVERHAUL AND REPAIR COTTON MILL MACHINERY
CHARLOTTE, N. C.
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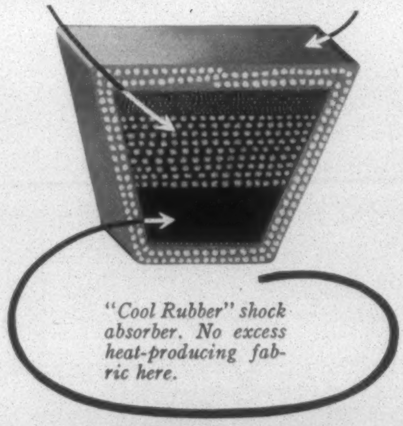
B. F. GOODRICH, INDUSTRIAL DIV.

MULTI-V BELTS

B. F. Goodrich Multi-V Belts are true V belts of straight side construction made in accurately machined molds. The two-ply cover takes plenty of wear and seals out moisture, oil and grit. Each load-carrying cord in the carcass is surrounded and cushioned in rubber, and the thick rubber base of the belts allows it to absorb the shock of sudden loads. The use of a special rubber compound in these belts produce 75 per cent less internal heat than other compounds, and the use of Agerite, a patented B. F. Goodrich ingredient, improves aging qualities as much as 200 per cent.



Low stretch cords—floating in rubber carry load, take shock.

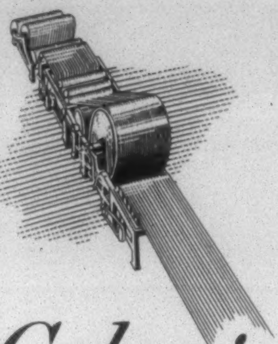
Flexible cover takes wear, seals carcass.

"Cool Rubber" shock absorber. No excess heat-producing fabric here.

STOCKS CHARLOTTE & GREENVILLE

Information on special
B. F. Goodrich V-Belts
WIRE GROMMET OPEN-END
COTTON GROMMET OIL RESISTING
STATIC DISCHARGING OIL PROOF
is available on request

THE ENGINEERING SALES CO.
Charlotte, N. C. Greenville, S. C.



● George Washington wrote in his diary: "In this manufactory, they have the new invented carding and spinning machines . . . the latter would spin 84 threads at one time by one person . . . A number of looms, 15 or 16, were at work with spring-shuttles, which do more than double work . . . The cotton stuffs which they turn out excellent of their kind, warp and filling both now of cotton."

Today—mill operators realize the importance of proper starch selection for particular types of warps. They choose Staley Textile Starches because the strict uniformity of every shipment permits sizing formulas to remain constant. Staley's complete line of modified and unmodified starches—for every textile use—has been developed by skilled chemists and is under rigid laboratory control during every step of the processing. If you are not already a Staley customer, now is the time to get acquainted with their prompt service and complete cooperation. Staley's can recommend the correct starch for all your sizing requirements.

Colonial Weavers..

THE FIRST COTTON MILL IN AMERICA

Number Twelve in a series published as a Tribute to the Development of Weaving through the centuries

In 1798, President Washington visited one of the new cotton spinning mills and noted it in his diary

Staley's
CORN AND SOY BEAN PRODUCTS
REG. U. S. PAT. OFF.

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A. E. STALEY MANUFACTURING COMPANY

DECATUR, ILLINOIS

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NEW YORK
BOSTON

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the bulletin board

Questions, answers and other material submitted by the readers for use in this column should be addressed to Field Editor, Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C. Material need not be in any particular form, since it will be properly edited before publication.

LINT FROM THE OPENING ROOM

Dear Sir:

In the last [Nov. 15] issue of TEXTILE BULLETIN there appeared an article entitled "The Textile Graduate," by an anonymous writer. The attached is a reply to this article which I think is self-explanatory. If you choose to use this article you may do so as a signed article, which I prefer, or anonymously if you think best. . . .

John M. Caughman,
Spartan Mills.
Spartanburg, S. C.

¶ *Thanks very much, Mr. Caughman. We like to present both sides of every question. Your article appears in this issue of* TEXTILE BULLETIN. *For the edification of the readers, Mr. Caughman's letter and article are in reply to an article by Contributor No. 2 [The Bulletin Board, Nov. 15]. We hope that more and more readers will avail themselves of the opportunity to express their views through this medium.—Eds.*

Gentlemen:

For a considerable time, I was the receiver of your TEXTILE BULLETIN, and was at a loss to know to whom I should give thanks until recently your representative [Mr. Shinn] called by to see me to get my subscription.

After Mr. Shinn explained to me the policy you use in connection with the distribution of your paper to the various department heads in all mills, I realized that your paper was doing something that was entirely different and new, so far as I have been able to learn. I feel that it certainly is worth while and should build up a splendid relationship between you and the textile organization throughout our Southland. I would like to take this opportunity to personally thank you for sending me your TEXTILE BULLETIN for a considerable time without charge, and to congratulate you on the policy your paper shows with reference to subscription.

J. F. Byrd,
Marshall Field & Co.

¶ *Thank you, sir. For the past six years,* TEXTILE BULLETIN *has supplemented, and was the first textile journal to supplement its paid circulation with directed distribution to key executives.—Eds.*

Leather Belting Co.,
Charlotte,
North Carolina, U. S. A.
Dear Sirs:

With reference to your advertisement in TEXTILE BULLETIN, Volume 71, of the 15th October, 1946, we would be much obliged if you could send us a catalogue regarding the 3-Star Leather Belting with full instructions.

Yours faithfully,
A. Saltiel,
Manufacture Nationale De
Convertures & Lainage.

Alexandrie, le 29th November, 1946.

¶ *To Charlotte Leather Belting Co., thanks for the letter. To A. Saltiel, merci beaucoup. The* TEXTILE BULLETIN *apparently is getting around these days.—Eds.*

Gentlemen:

. . . . I take this opportunity to reply to a letter by Mr. George S. Baker, Jr., which appeared in The Bulletin Board in a recent [Nov. 15] issue of TEXTILE BULLETIN and in which Mr. Baker takes an unwarranted blast at Southern cotton mills for "selling all the output of the mills through New York representatives" and further "we are unable to buy this product of the South here in the South, without going to New York to do so." . . . .

. . . . Very few selling agents located in the South simply because the Southern consumer market for cloth is not sufficiently large to warrant their operation. Were the cotton mills to sell direct to Southern consumers on small orders, the costs incurred in such sales would more than nullify the profit in manufacturing the cloth.

The large established selling houses in New York handle a cotton mill's entire output of cloth in most cases, and relieve the mill of the expenses incurred in selling the cloth. In addition, the selling houses handle most of the paper work, and guarantee the accounts for the mills, thus relieving the mills of additional burdens. . . . .

. . . . . Let Mr. Baker remember that Southern consumers have been buying from New York selling houses for years with satisfactory results, and that cloth of the kind he desires has been in short demand for some time, which may account for his inability to obtain it.

Contributor No. 15.

Dear Sir:

. . . . We are attaching the list to whom TEXTILE BULLETIN is to be mailed. The address of each will be care Virginia Mills, Inc., Swepsonville, N. C.

Also attached is our check for $140.00 to cover the cost of these 28 subscriptions for a period of five years at $5.00. . . . .

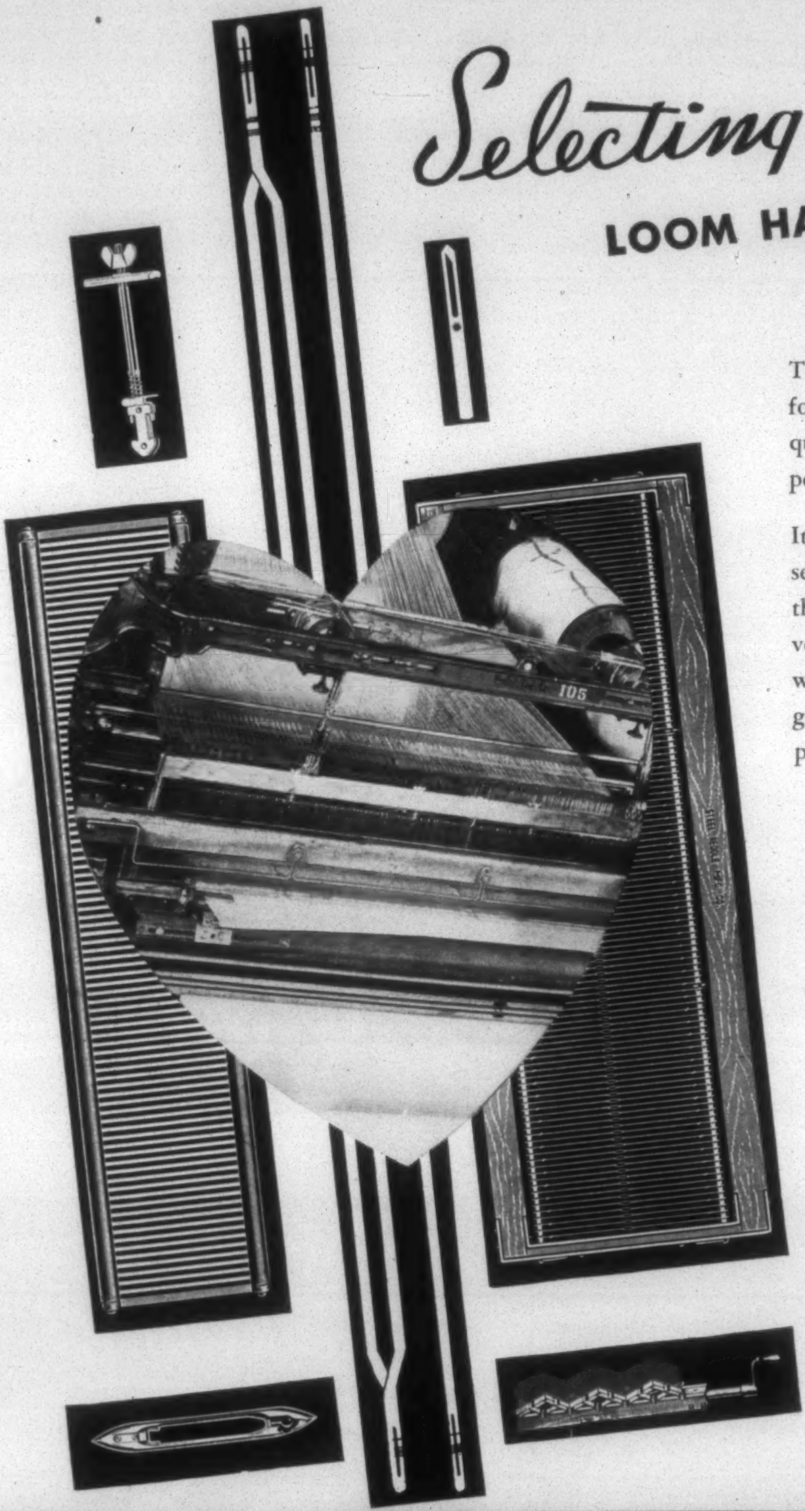
Virginia Mills, Inc.
Swepsonville, N. C.

¶ *It is interesting to note that all of these subscriptions go to the superintendent, overseers and foremen who, it is expected, will make good use of the technical data and information available in* TEXTILE BULLETIN. *[Plug].—Eds.*

Dear Bulletin Board:

Now what goes on? I have just searched the Dec. 1 issue from "Kiver to Kiver" and I find no Bulletin Board. But, alas, my Boy Scout training comes up and I must be fair. I think the article ["Personnel Management and Human Relationship"] by Mr. Thomas Carroll is one of the finest I have ever read in any textile publication and I want to commend TEXTILE BULLETIN for publication of this article.

In my work as second hand in the spinning department, I always find that the frames are in place (they are bolted to the floor). The card room always gives us the roving we need and about the only things I have to worry or work with are people. Anyone who has ever spun as much as three or four yards of cotton knows that a section man worth over ten cents per week must be able to fix individual ends regardless of his ability to take a spinning frame apart and put it together blindfolded. But the man to whom you can really bow is the man who can fix a fellow worker. The most delicate machine ever conceived is simple indeed compared to the human, and the man who can keep his fellow man happy on his job



Selecting
LOOM HARNESS EQUIPMENT

The heart of your Loom is in the Harness, for upon these vitally important parts the quality and the output of your Loom depend.

It pays, therefore, to be most careful in the selection of such equipment. Be positive that your harness equipment has been developed and engineered by an organization with the facilities, man power and background to devote to the perfection and proper manufacture of such equipment.

Ste-Hed-Co

Loom Harness Equipment is made in four of the most modernly equipped plants in the industry, all of which are in a position to supply you with the most efficient product to help obtain top-notch quality and production from your looms.

Standardize on

Ste-Hed-Co

Loom Harness Equipment—the most perfectly made and complete line in the Textile Industry.

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2100 W. ALLEGHENY AVE., PHILADELPHIA 32, PA.
and **SOUTHERN SHUTTLES DIVISION**
621 E. McBEE AVE., GREENVILLE, S. C.
PLANTS OR BRANCH OFFICES: Atlanta, Ga. Greensboro, N.C., Providence, R.I., Montreal, Que.

is worth his weight in 40-cent cotton. Please, Mr. Clark, gives us "more of the same."
James T. McMahon.
Nashville, Tenn.

¶ *It's nice to know you were looking for The Bulletin Board. You'll find it regularly in the 15th of the month issue. For "more of the same," keep reading* TEXTILE BULLETIN. *We're very much interested in this field of personnel relationships and will publish all the worthy material on it we can find.—Eds.*

Gentlemen:

. . . . For the past year, many business firms have been coming to O. P. A. to get highly skilled and responsible employees. The growing number of these requests makes us think that members of your industry will want to know about the unusually well qualified people who are again available for employment in business and industry. . . . .

. . . . We can now refer employers to many types of very competent business specialists, who have well-rounded experience in almost every industrial and commercial field. Many of these people have had unusually broad experience in marketing and distribution, cost and price analysis, management, administration, statistics, accounting, law, economic analysis, etc. . . . .

. . . . We will be glad to provide them [employers] with the training and experience records of people who have the qualifications needed to meet their specific requirements.

Employers can get these records by writing to my office or to the personal office of nearest O. P. A. regional or district office.

Chairman, Employment Service,
Office of Price Administration.

¶ *Latest information here is that O. P. A. died a natural death some days ago, and that its functions were taken over by O. T. C., or some such alphabetical agency. It is felt, however, that O. P. A. was well enough known during its lifetime, particularly in the textile field, that its former address will probably still suffice.—Eds.*

THE ROUND TABLE

It seems that practically everyone in the textile industry knows almost all there is to know about the business. At least that's the impression we get from the lack of questions and requests for information submitted thus far.

This section of The Bulletin Board is designed to serve the readers as a clearing house for all types of technical and controversial matters. If you have any questions you would like to have answered or any matters on which you would like the opinion of someone else, send it in to us care the Field Editor, TEXTILE BULLETIN, P. O. Box 1225, Charlotte 1, N. C. We'll publish your question in this section, and in the following issue will publish the answers or replies received from other readers. Send your questions and answers in any form you wish. We'll edit them properly before publication. All material used will be paid for at regular space rates.

In the meantime there is a matter on which we would like some information. Probably you have heard at least rumors about the remarkable new Swiss loom, reportedly being manufactured in this country by the Pullman Co. Thus far we have been unable to unearth any concrete information on the loom, how it operates, it manufacturer, or what, if any, mills are using or intend to use it. Does anybody know?

MISCELLANY

The number of cotton spindles in the South has increased from four million to over 19 million since 1900, while the number of spindles in the remainder of the country has decreased from 15 million to less than five million.

In a recent fire 435 bales out of a total of 900 bales of cotton were burned, and all remaining bales were wet by water from sprinklers and hose streams. These 900 bales were stored in a single pile and when the fire broke out, the sprinklers could not be fully effective because of high piling and lack of aisles. A suggested standard, by the Associated Factory Mutual Record, is to store cotton bales in piles not over 15 feet high and at least three feet below sprinklers. Limit piles to 500 bales separated by an eight-foot longitudinal and six-foot lateral aisles.

In Kansas City, says *Time,* a restaurant owner phoned Mrs. Jane Kilroy, complained that her son had been there, had left his name all over the plate.

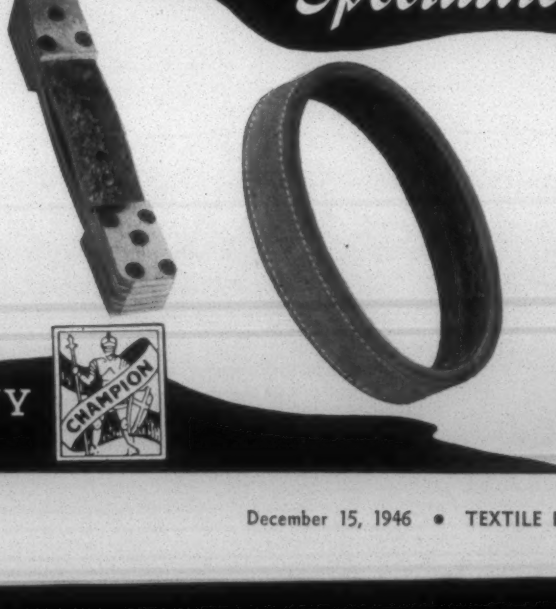
The high winds reported a short while back were made up of the sighs of relief which issued from millions of throats when "The Great Gargoyle" finally sent the coal miners back to the pits. It will be interesting to watch developments in the next few months with Congress reportedly straining at the leash to get in high gear on labor legislation. It seems that John L. has miscued at last, and has included a lot of other unwilling labor leaders in his mistake.

The authors of some books write as though their readers had nothing to do but kill time, and they might be right at that.

There are 830 cotton, rayon and wool [spinning and weaving] mills in the South, operating 19,285,906 spindles and 366,103 looms. The South operated 17,028,028 active cotton spindles and consumed 763,427 bales of cotton in the period 1943-44, as compared to 4,396,890 spindles operated and 85,257 bales of cotton consumed by all other states during the same period.

What is a well-balanced man? There's a good definition of such a person on the office wall of A. S. Magnant of the Beacon Mfg. Co.: "A man who is good enough to be decent, and bad enough to be human, who works enough to be useful, and who plays enough to be happy.—*The Howard Way.*

Specialists in Textile Leather *Specialties*



We invite the hard jobs that we are frequently called upon to produce because by doing them better we feel we are contributing more to the textile industry—and, we have learned and improved our skills through the experience. Wherever our "CHAMPION" trademark appears on textile leather products it means just that.

CHAMPION

W. D. DODENHOFF COMPANY
INCORPORATED
GREENVILLE, SOUTH CAROLINA

CaroGant
Cotton warp sizing

DUOFOL-L
A sulfated condensation product

ALKAMERCE
The ideal mercerizing penetrant

HART PRODUCTS
QUALITY CHEMICALS FOR EVERY PHASE OF TEXTILE PROCESSING

HYMOLON
Wetting out agent, emulsifying agent, detergent

TRUKON
A good water-repellent for cottons, rayons, woolens

ARYLENE
An exceptional carbonizing agent

CATYLON
Cation-active softener

For a quarter of a century, outstanding textile mills have standardized their wet processing operations with HARTEX chemicals. HARTEX research, keeping pace with the latest development, has met every changing requirement of the textile industry. Always—all ways—Hart Products have done their job in rendering an efficient service to the textile industry.

If you have a processing problem—let Hart research give you the benefit of this long mill experience. Write today for full information on Hartex Products or send for a Hartex Specialist to go over processing problems with you.

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Cotton Warp Dressings
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Send for free booklet, "Mercerizing and ALKAMERCE—The Ideal Dry Mercerizing Penetrant"

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based on research

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STABILITY
FOR CONTINUOUS LOW POWER CONSUMPTION

LILY-WHITE OIL

Sinclair Lily White Oil, properly selected for the specific service, aids in reduction of power cost.

Correct lubrication assures minimum friction, long bolster life, and low power consumption in continuous operation.

Lily White Oils are highly finished spindle oils. They possess stability characteristics to resist deterioration. Viscosity does not increase in use. Bolsters are free from deposits.

These oils are made from selected crudes. Tough film strength and high lubricity are built into the oil through special refinement.

Lily White Oils are made in viscosities to suit all package loads and spindle speeds.

SINCLAIR TEXTILE LUBRICANTS

FOR FULL INFORMATION OR LUBRICATION COUNSEL WRITE SINCLAIR REFINING COMPANY, 630 FIFTH AVENUE, NEW YORK 20, N. Y.

ABP textile bulletin ABC

Vol. 71 December 15, 1946 No. 8

The Burden Shouldn't Be Borne Altogether By Textile Schools

By JOHN M. CAUGHMAN, General Superintendent, Spartan Mills, Spartanburg, S. C.

OUR textile schools and their graduates do not need defending, so a reply to the article, "The Textile Graduate" (TEXTILE BULLETIN, Oct. 15, 1946), is slightly superfluous, but I do not feel that I can conscientiously pass it by without comment. Certainly our textile schools are not perfect, but they constantly are being improved. The same is true of all our seminaries, colleges and universities. There are many things that the young medical school graduate learns after leaving medical school, and I am certain that any doctor will tell the "graduate of 1937" that he (the doctor) has kept on learning long after his medical school days. I wonder if our student ministers are taught while in school how to handle a "gossiping sister" or a stubborn deacon? Did the "graduate of 1937" feel for four years in college that when the day came for him to receive his sheepskin that his education would be complete? Did it occur to him that when his teachers gave him reference reading assignments that he was preparing the student for continued study long after the end of his school days? Or did he feel that the teacher was simply making college days unpleasant.

He bemoans the fact that there were and are no text books on "How to get along with textile employees." Are textile workers so different from other workers that a text book should be written about them to explain the differences? I think it would be an insult to the whole textile industry if such a text book were written.

If this "1937 graduate" did not learn to get along with children while he was a child in a cotton mill community, if he did not learn to get along with students during college days, then no text book will do him any good. On the other hand, if he did learn to get along with children, students and professors without a special course, he will get along with the boss and textile workers or anyone else. Most of the valuable things that we learn in life do not come out of text books, but we learn only with age and experience and from the experiences of others. Society has not yet let future husbands and future wives gain prior experience in the greatest of all responsibilities—the bringing into the world and the rearing of children.

The fact that a few people have said that a textile school is the last place they will send their boy is no reason to condemn the textile schools or to feel that men have lost faith in the industry. Have you ever heard a doctor say, "I hope my boy stays out of medicine." Most of us have our down-in-the-mouth spells about our jobs, but deep down most men who are successful in their chosen line of endeavor hope their sons will choose the same field of endeavor as theirs. After all, do not parents make a mistake in "sending" their sons and daughters to college? Shouldn't the boy or girl be allowed to choose his or her life work, and be encouraged to prepare himself or herself in the best way to begin that chosen work?

In my opinion, too many people go to college with the wrong idea. If boys or girls go to college with the idea that they are going to spend four years getting a diploma, which in turn will enable them to command a "big job" or high salary simply because they have spent four years behind the four walls of a college, then it would be better that they not waste the time and money on four years in school.

I am not being idealistic in the following statement, but very practical. Boys and girls should not seek a college degree with the false idea that it will make it easier to earn a living, but with the idea that it will prepare them to live better with their fellow men. They should seek an education with the idea of preparing themselves to live such a life that the community and the world in which they live is better because of what they have contributed to others. Has the "1937 graduate" served a group of boys as a scoutmaster, a Sunday School teacher, a school trustee, chairman of the Red Cross or Community Chest drive, or any other community activity; does he dodge jury duty, fail to vote and too busy to work in his church?

The training that a boy or girl receives in school is simply a nice set of tools to start life's work, the equipment with which to begin to work. Lock that training in some dark box of one's mental storage chamber and it soon becomes foul with rust and beared with uselessness. Use that training and it becomes shining with ideas. The young college student must learn to always keep his thinking clean shaven —even to the time of retirement. The most expensive set of camel hair brushes and the most expensive pallete, oils and color never produced a painting without the guiding hand and mind of the artist.

To make the statement that "politics" is essential in getting ahead is an insult to everyone that has advancéd the ladder of promotion. I am still old fashioned enough (while not old) to believe that Horatio Alger stories do come true. The word ability still has its original meaning, and most times society and business do not fail to recognize and reward ability.

I'm not going to bother to tell the "graduate of 1937" how he can determine if the boss likes him except to say if he doesn't like the boss it is a pretty safe bet the boss doesn't like him. Neither am I going to enter the argument as to "who will make the best superintendent, a spinner or a weaver," except to say that be he either a carder, spinner or weaver—if he has managerial ability and what it takes to run a job anyone of the group will be successful when the responsibility is given him. Look at any roster of mill men and explore these men's background. They do not hold their present positions simply because they were carders, spinners, weavers or because they had pull or because the boss liked them. One word, ability to do a job which someone recognized explains their present position.

A 1946 All-American football team has just been chosen. Were those 11 men chosen because coaches liked them and put them on the team? Were they chosen because they were able to win favor in the eyes of certain sports writers, or because they photograph well? No, they had what it takes. They were blessed with certain physical and mental assets which were developed through attention to detail and hard work, plus experience on the playing field and along with the previous experience of the staff of coaches which developed them. True it is there are many more, given the same training the same opportunity, would have been just as great, but we do not condemn the great game of football because they were not chosen. No, the game remains great not because boys play to see their names in the headlines and to become All-American, but because they love to play the game.

Certainly there are overseers of spinning, carding, weaving, etc., who have ability and when given an opportunity will be successful on more responsible jobs. Some are textile school graduates, others are not, and still others never went to college at all. Some will get the opportunity, others will never. It is the same in every field of endeavor. To some the opportunity comes early and that star blazes across the sky of success; sometimes only a quick short blaze that is soon burned out—at other times a light that lasts long and contributes much. To others the opportunity comes late and to some not at all. This I think is best expressed in Thomas Gray's "Elegy" written in the country church yard. I quote the 13th and 14th stanzas:

But knowledge to their eyes her ample page
Rich with the spoils of time did ne'er unroll;
Chill Penuray repressed their noble rage,
And froze the genial current of the soul.

Full many a gem of purest ray serene,
The dark unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air.

Good Personnel Is Necessary for Good Morale

– An Anonymous Article By A Lifelong Southern Mill Worker –

I AM a Southern cotton mill man and have been for the past eight years. I intend to stay with it because I like it and like the mill people. But let us face some real facts which we are all aware of if we will just admit them. Since the beginning of the cotton textile industry a majority of the general public has looked on cotton mill people as a lower class. Cotton mill people have been wronged. Some of the best people I ever had the privilege to meet were mill folks. Fortunately, there is not so much of this feeling now as used to exist, but this wrongful attitude still must be fought.

Some supervisors kid themselves when they say it is old stuff that cotton mill people are looked down on. They will tell you that our children are no longer identified as cotton mill people, that they go to the same parties and are of the same class in every respect—but they are sadly wrong.

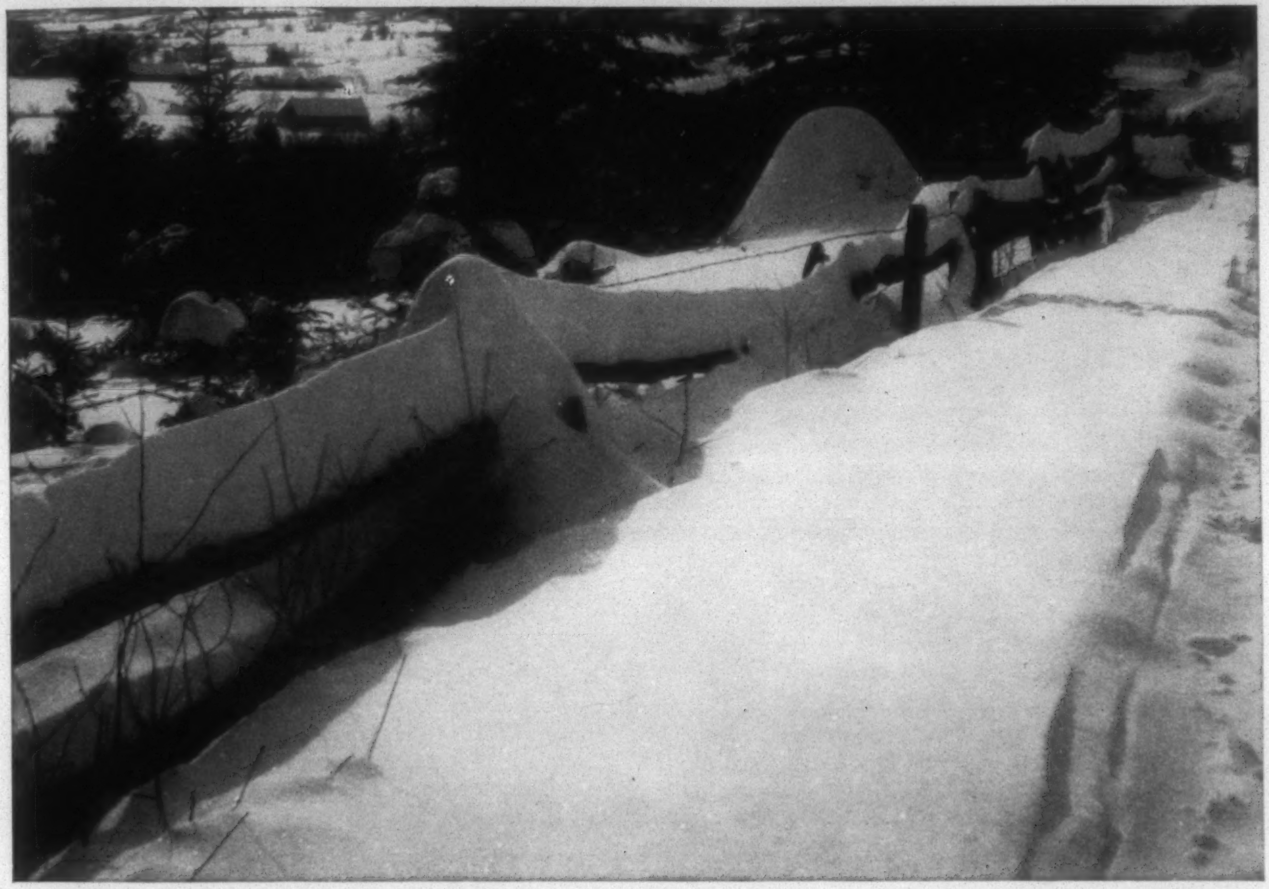
This is a problem which should be remedied right now; I say that it is the fault of supervisors and other members of management that this condition exists, and I feel that management should set up some sort of weeding-out system and get rid of the bad actors. I would say that some 95 per cent of cotton mill people are good, honest, high-quality folks. Why let them be termed as low-class when we can weed out the five per cent which causes the bad names and black eyes.

A poultryman no doubt hates to lose one of his flock, but if there is a possibility of one diseasing others in the flock he never hesitates to chunk out the sick chicken.

If management would give this a little more thought it would see that we must have the best personnel to build up outside as well as inside morale for the desired results. Then and only then will there be a proper attitude from employee to employer, something very fundamental in a successfully operated mill and village which both mill workers and outsiders can be proud.

AHCOVELS* E&F

ANIONIC SUBSTANTIVE SOFTENERS



Will Not Discolor White Goods In ANY Concentration

This is only one of many unique and important features which characterize AHCOVELS E and F. Another distinctive feature is that they do *not* reduce the light fastness of any color. That is because they are anionic. Yet they have no free alkalinity,—organic or inorganic.

Other notable advantages are as follows:—

- Have approximately same resistance to hot iron scorching as an untreated fabric.
- Give a velvety soft finish with a firm full hand.
- Resistant to repeated washings or dry cleansings.
- Produce non-greasy, odorless finish, which will not discolor or develop odor with heat, age or light.
- Easy to apply; exceptionally economical to use.
- Mix readily with starches, most gums and many other finishing materials.

AHCOVEL E

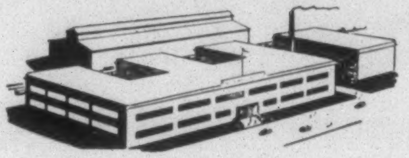
—was originally developed for hard twisted fabrics, where good draping qualities are normally difficult to obtain—such as hard twist acetates and nylons. It flexibilizes the fibres.

*Trade Mark Reg. Patented

ARNOLD, HOFFMAN & CO., INC.
MANUFACTURING CHEMISTS
ESTABLISHED 1815 • PLANTS AT DIGHTON, MASS. AND CHARLOTTE, N. C.
PROVIDENCE, RHODE ISLAND
NEW YORK BOSTON PHILADELPHIA CHARLOTTE

IRREGULAR PAGINATION

REMODELING REMINDERS



By MERRILL MORRIS

CAREFUL planning of remodeling activities now can save much unnecessary trouble, worry and expense later on. Too frequently, those who modernize jump into their respective projects without sufficient thought for the future. Consequently, after a year or two costly changes must often be made—changes which could have been avoided through adequate forethought at remodeling time.

Before any work is begun, construction and modernization plans should be analyzed completely in light of the long-term pull. Before a single nail is driven, one should answer the questions: Will the work I am planning be obsolete in a short year or two? Are there jobs which could be done cheaply at modernization time, but which would prove expensive if handled later as separate projects? Would it be more sound to use better quality, longer-lasting materials and equipment than the less expensive items we are contemplating using now? Are we doing any constructive activities now which will require extensive change at an early date? Answer these questions for yourself, and then consider seriously the following remodeling reminders:

(1) Although you may not be contemplating use of air conditioning at this time, if there is possibility of using such units in the future, give thought to the probable wisdom of installing suitable duct-work during current reconstruction operations. Because a great part of the cost of installing an air conditioning unit stems from the installation of duct-work (in an old building) it is often least expensive to make this installation while other construction work is going on. Careful analysis of this matter may save you much money over the long run. Consult a good engineer on the subject if necessary.

(2) For safety's sake, isolate any sections where inflammable materials are likely to be housed. Give attention to the placement of fire doors, fire walls, fire escapes, etc. Forethought to fire protection can save loss of life and money in the event of emergency in the future.

(3) How is the wiring in your building? If somewhat old, perhaps a rewiring job now, while the building is torn up for remodeling, would be wise. For economy's sake, take care of as many different modernization jobs at one time as possible. Thus, the services of the building need be limited for an absolute minimum of time by workmen, construction activities, etc.

(4) Check personally on the quality of materials used in reconstruction. Know what is being used in your building. Insist on high quality equipment and materials which will last a long time—and not require expensive replacement at an early date. Check especially on paint quality (cheap paint chips easily), wood quality (poor wood may shrink), hardware quality (mediocre hardware items break readily), fixture quality (high class fixtures will often outlast inferior ones two-to-one), etc.

(5) Would a call or signal system serve an efficient purpose in your building? Such a system can often make for greater efficiency. During remodeling is an economical time to install one.

(6) How is the plumbing situation? Would renewal of certain equipment at this time save money in the long run and prevent unnecessary and expensive "tearing out" at a later date? When modernizing plumbing, be sure to provide for adequate clean-out plugs and vents. Readily accessible clean-out plugs can prevent many an expensive plumbing bill in the future. Shut-off valves in the plumbing system should be located with an eye toward convenience. The days of placing such valves where they can't be found or reached are over. Furthermore, install a valve system which (in case of emergency) permits shutting off a minimum of units at a time. Avoid a plumbing and valve system which requires many units to be turned off merely because one or two units must be closed out for repairs.

(7) Is your heating equipment likely to become obsolete soon? If so, make the necessary changes now, while the building is under construction anyway. Check especially to make sure your present heating equipment is giving maximum efficiency for fuel money. Does your present equipment permit use of the most economical type of fuel for you? Perhaps a change in unit-type would save money in the long run through more effective use of fuel. Are pipes, etc., properly insulated? If not, during modernization is the time to correct this deficiency. Are radiators painted so as to give maximum efficiency? If you aren't sure, check with a reliable engineer. Some colors and types of paint permit greater radiator efficiency than others. During remodeling, identify all piping within the building with characteristic colors of paint. Then, in case of need or emergency, specific pipe systems can be readily identified.

(8) Make sure any moving machinery within the building is properly insulated. Building vibrations, rattles, hums, and other noises are hard on the nerves. Get rid of such nerve-wrackers once and for all.

(9) Planning to install a fire alarm or sprinkler system? Select alarm and sprinkler systems to fit your individual requirements. Before installing, consult your insurance agent as to any systems the installations of which will result in reduced fire insurance rates.

To summarize, keep your building out of service for a minimum period by doing as many jobs at one time as possible. When modernizing today—keep tomorrow in mind!

Federal Government Finds Itself Holding Huge Bag of Raw Wool

FALLACY of continued government interference in textile fibers is clearly outlined in a study of the production and supply picture of domestic and foreign wool in the December issue of *Rayon Organon,* the statistical review of the Textile Economics Bureau, Inc. Holding a stock of more than 500,000,000 pounds of domestic apparel wool, grease basis, the Commodity Credit Corp. finds itself strapped by law from selling below parity, and, with parity rising, very little of the domestic stockpile is moving into productive channels, the *Organon* points out.

Also contained in the issue is a new table of broad woven rayon fabrics showing the average weekly mill gray cloth production by months from the beginning of 1943 through October, 1946. The data, gathered in co-operation with the National Federation of Textiles, Inc., and Textile Surveys, Inc., reveals that weekly production in October, 1946, reached an all-time high of 36,000,000 yards per week. Total rayon yarn stocks in weaving mills at the end of October were 30,000,000 pounds, indicating a continuing low ratio of yarn inventory to gray goods output.

Caustic soda shortages, election day and Thanksgiving holidays all combined to slow rayon yarn output in November, according to the *Organon.* Shipments in November totaling 70,500,000 pounds were six per cent below the October figure of 75,100,000 pounds. Total shipments for the first 11 months of the year amounted to 772,000,000 pounds, a ten per cent gain over the corresponding period in 1945. November rayon filament yarn shipments amounted to 57,500,000 pounds (41,200,000 pounds of viscose-cupra and 16,300,000 pounds of acetate), while staple deliveries aggregated 13,000,000 pounds (9,400,000 pounds of viscose and 3,600,000 pounds of acetate). Rayon stocks held by producers at the end of November increased over October levels. Producers' stocks of viscose-cupra yarn were 8,200,000 pounds, acetate yarn 1,800,000 pounds, and staple fiber 2,600,000 pounds.

In its study of the raw wool situation, the *Organon* shows that although United States production of raw wool has declined to the extent that the 1947 clip is estimated at 340,000,000 pounds, grease basis, production in 1942, the peak year, was 459,000,000 pounds. The decrease is attributed in part to the decline in the number of sheep raised, the large stocks of wool held in the country, and the unfavorable price relationship between domestic and foreign wools. United States wool production has declined from a high of 11.8 per cent of the world total in 1935 to a low of 9.7 per cent in 1946.

Judging from stocks of wool held by the principal exporting and consuming countries, it is apparent that the current visible stocks of wool are more than ample and that the rate of consumption is not sufficient to balance the supply picture. World carry-over of apparel wool on July 1, 1946, was estimated at 4,958,000,000 pounds, grease basis, three per cent less than 1945, but over three times as large as the 1934-1938 average, and one and one-third times the estimated 1946-1947 world total wool production, including carpet wool.

Exports of raw wool (apparel and carpet classes) by Australia, Argentina, New Zealand, British South Africa, and Uruguay during the 1945-1946 season reached a record level of over 2,000,000,000 pounds, actual weight basis, or 76 per cent greater than in the preceding season. During the 1945-1946 season, shipments of wool to the United States by these southern hemisphere producers aggregated over 1,000,000,000 pounds which constituted half of their total wool exports. In 1939, these countries shipped only 14 per cent of their total exports to the United States.

While the world consumption of raw wool may continue to exceed pre-war levels for some time, the large visible stocks will not in all probability be reduced. The use of wool in foreign countries will no doubt be increased, as evidenced by greater consumption in France and Belgium. On the other hand, wool consumption in the United States, Canada and southern hemisphere countries, which was greatly increased during the war, probably will decline below wartime peaks.

Beginning in 1943, the United States Government embarked on its first program for the mandatory purchase of the entire United States wool clip. The purpose of the program was to encourage wool production and to support the price of domestic wool. Since its inception, the program has brought about government purchase of approximately 1,200,000,000 pounds domestic wool, grease basis. These purchases were made at an average price of 41.1 cents per pound, grease basis. After adjustment for grade, the average prices received by farmers for their wool during 1943, 1944 and 1945 were 41.6 cents, 42.4 cents, and 41.9 cents. The 1946 price is expected to average about 42 cents.

As a result of the Federal Government's domestic wool purchase and pricing programs *(Continued on Page 69)*

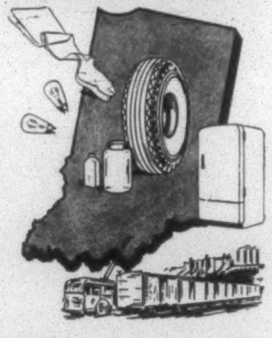
Locate-Your-Plant-Here Campaigns

By DAVID MARKSTEIN

INTERESTED in moving? Putting up a new plant as a post-war expansion move? Want a new location where labor is easier to hire, where there are easier transportation facilities, more of whatever you need? Almost every state in the Union will welcome you and, while that's not exactly news, the fact that states are advertising their industrial advantages, ~~and~~ setting up new facilities for serving manufacturers, is very new.

State industry advertising is a new trend. Railroads have done it before, but not on a large scale. Utility companies have done it. But their efforts are becoming small compared to the flood of state-sponsored industrial advertising campaigns. What's more, the states are setting up industrial departments to serve textile manufacturers. They are advertising—and doing everything to *serve* as well.

INDIANA



The State of
Diversified
Industry

INDIANA manufacture covers a surprisingly wide range. Hoosier cities have varied industries, so that shortages in one line do not affect all business in a community. Here are manufactured such different commodities as silk hosiery, tires, saws, glass jars, refrigerators, packed meats, and a great variety of others. Heavy industry is well represented.

Indiana . . . by being diversified . . . is protected against depressions or bottlenecks in any single line. This is a vital point to consider in planning your move to Indiana, the State of variety in industry.

INDIANA

Your LOGICAL
Industrial Location

* Send for this
FREE BOOKLET
Get the Facts

INDIANA DEPT. OF COMMERCE AND
PUBLIC RELATIONS . . . . . DEPT. N-11
STATE HOUSE • INDIANAPOLIS, INDIANA

MANUFACTURERS OF

DECORATIVE PORCELAIN
RADIOS AND ELECTRONICS
WOOLENS AND WORSTEDS
PREFABRICATED HOUSES
PLASTIC COVERED WIRES
PLASTIC CONSUMER ITEMS
FURNITURE HARDWARE
CANNED SEAFOOD
MEAT PRODUCTS
LADIES WEAR
KNIT GOODS
CHEMICALS
DENTAL BURRS
RUBBER PRODUCTS
PICKLES
NECKTIES
RAYONS
CONTAINERS
ELECTRODES
FURNITURE

LOCATE IN
NORTH CAROLINA

Establishment of these plants in North Carolina did not just happen! Their executives chose North Carolina for many reasons—abundance of raw materials, ample hydro-electric power at reasonable rates, mild climate permitting year-round operation, proximity to the richest consuming markets yet away from congested areas, and *stability of North Carolina's native-born labor*, about which a manufacturer-newcomer wrote:

> **"It was necessary to employ inexperienced people and train them. We found these people were easily trained and showed a high degree of enthusiasm for their work. We have practically no absentee problem. All our workers are exceptionally loyal and vitally interested in the welfare of the company."**

During wartime tens of thousands of North Carolina men and women, in industry and in the military service, received specialized training. Today they and their skills are available for peacetime production.

If you are planning to establish a new plant, investigate North Carolina. Our Industrial Engineers will be glad to develop accurate information covering your requirements. Write 3464 Department of Conservation and Development, Raleigh, N. C.

These two advertisements are typical of the promotional work being carried out by various states in efforts to attract new industries.

What do the various states offer the textile manufacturer? A survey of these campaigns, from sturdily industrial Massachusetts to sunny and half-agricultural California, reveals that the state industry attraction campaign, as the big time proposition it has come to be, is something new.

Few states bothered to promote their industrial advantages before the war. Many of them, tasting industrial prosperity for the first time during the war years, want more payrolls; others, formerly industrialized heavily, now find they must advertise to meet competition.

Contributing to this increasing trend of states to advertise their industrial potentialities, is an undeniable trend among many textile manufacturers to decentralize their plant activities, locating new plants in smaller communities or in areas which were formerly agricultural, and a tendency among smaller textile plant operators to choose locations where they will not have to compete for manpower with older, larger factories.

A study of ten typical industrial campaigns reveals that only one is older than two years—and that only seven. The majority have been in existence between 12 and 15 months. Significant is the fact that all of these state advertisers plan to expand their campaigns still further, and new industry-attraction campaigns are getting underway all the time. The industrial campaigns have many points of similarity, especially in the appeals and media used. Almost all employ trade publications, supplemented sometimes by consumer magazines which are read by manufacturing executives. Only one state—Iowa—uses radio at all, and that only in promoting Iowa's centennial last year. Most also employ newspapers.

A majority of the states have programs of one sort or another, ranging from sporadic news releases to regular home state advertising campaigns, to acquaint the local folks with what is being done. All use the primary advertising media—trade publications, newspaper and general magazines—to bring in inquiries for the "punch" presentation, which ranges from a simple booklet describing the locality in detail, to a completely integrated direct mail campaign ranging over many mailings. The state industrial advertisers regard this direct mail presentation as the factor which brings in their payroll bacon. Almost without exception, state and community industry-attraction advertisers are now employing the services of advertising agencies.

What sort of appeals are used to sell a textile manufacturer on a particular location? Here again the advertisers are more or less unanimous in *(Continued on Page 68)*

USE PARAMUL 115

today's answer to better water repellent and stain resistant fabrics . . .

PARAMUL 115 Water Repellent, born of wartime needs, is a Cyanamid textile finish that imparts water repellency and stain resistance to fabrics for outer wear and equipment purposes.**

PARAMUL 115 IMPREGNATES THE FIBRES of a fabric with minute wax particles and aluminum salts, without any stiffening effects. It may be used with highly satisfactory results on cotton, rayon, linen and wool fabrics.

BECAUSE OF ITS FINE PARTICLE SIZE— PARAMUL 115 is a fluid emulsion that remains stable over a wide range of temperatures from freezing to tropical conditions. And it is safely stored without breaking down over long periods of time.

EASILY AND ECONOMICALLY APPLIED— PARAMUL 115 is odorless and harmless to skin or fabrics. Try PARAMUL 115 today and find out how it can help you cash in on the highly profitable market for water repellent fabrics. The services of our technical staff and research laboratories are at your disposal in using this product to achieve the best results in imparting water repellency and stain resistance to *your* fabrics.

AMERICAN CYANAMID COMPANY INDUSTRIAL CHEMICALS DIVISION
30 ROCKEFELLER PLAZA • NEW YORK 20, N. Y.

Among Cyanamid Products for the Textile Industry Are . . .

Penetrants • Softeners • Finishes • Sizing Compounds • DECERESOL* OT Wetting Agents
PARAMUL** 115 Water Repellent, and other Specialties and Heavy Chemicals.
FILT-R-STIL* demineralizing Units for Producing Chemically-Pure H_2O

*Reg. U. S. Pat. Off.
**Trademark

Use of Plastics to Strengthen Textiles

By DR. HARLEY Y. JENNINGS, Associate Director
Research Engineering Division, Dan River Mills, Inc.

UNTIL very recent years chemistry had occupied no place of importance in the world's textile industry, except in the final dyeing and finishing of yarns and fabrics. Mechanical methods alone were employed in the fabrication of yarns and fabrics from the three great natural fibers, cotton, wool and silk. The same was true of all the minor textile fibers, such as flax, hemp, ramie, etc.

The great family of synthetic fibers, headed by the various types of rayon, originally known as "artificial silk," are true products of chemistry, but in the conversion of these fibers into textiles, only mechanical processes were used.

The strength and continuity necessary to the manipulation of these fibers into yarns was bestowed upon them by mechanical spinning and twisting. They were then fabricated into cloths by mechanical weaving. These mechanical methods continue to be standard practice in the manufacture of practically all the world's textiles. The use of plastics, which supplements some of these mechanical operations and eliminates others, giving at the same time a stronger textile, is as new as today.

It is indeed true that the standard mechanical methods, by continuous refinement of the various machines used in a textile factory, had made steady advancement in the manufacture of yarns and fabrics, especially in the speed with which they are produced. But textile physicists have long known that there are inherent in all natural and synthetic fibers far greater values in strength and durability than may be obtained by the mechanical methods by which they have always heretofore been converted into materials for human use.

The rupture of a textile yarn or fabric, such as occurs when in use, may result from two causes—either by an actual break in the fiber, or by the slipping of the fibers one upon the other. Forceful breaking of the fibers is of rare occurrence in the practical use of the textile material itself, and usually when breaks take place from ordinary wear they are made possible by the shearing action of one fiber upon another when strain is applied. This shearing action results from the twisted position of the fibers, one upon another, brought about by the twisting operations of conventional textile manufacture.

Slipping occurs because the fibers adhere too weakly to one another. Because of these defects, mechanical methods have not been able to utilize more than a small fraction of the great strength that most textile fibers naturally possess. In seeking to overcome, or lessen these defects, research workers found that the application of plastics greatly reduced the shearing action, and because the plastics served to bind and compact the fibers together they were enabled to withstand much of the slipping action when strain was applied, such as occurs in the wearing of a cloth. The stretching of the plastic treated yarn and the drying and curing of it while under tension, are essential steps in the operation and are responsible for much of the increased strength.

Many natural plastics, with which science had been familiar for years, were found to have value when applied to textiles, but it was the discovery and the development during the last few years of the great family of synthetic plastics which gave the technologist his first real opportunity to add chemistry to the mechanical manipulation of textile fibers, and thus to give textile materials greatly enhanced strength and other desirable characteristics. The plastics now being used to strengthen textiles may be of natural origin, but by far the greater percentage of them are synthetic resins, of which there literally are thousands.

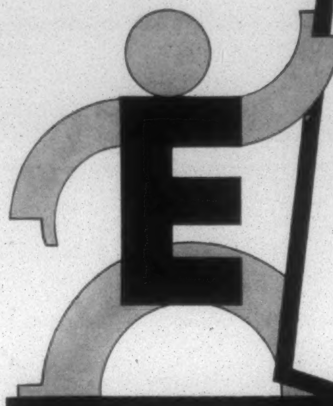
The first practical application of these plastics or resins to textiles was to a woven fabric. By this process a very thin film of resin was formed around the threads of the fabric. This increased the fabric's tensile strength and its resistance to wear. This was first accomplished a little more than 12 years ago and is a process owned by Dan River Mills, Inc., Danville, Va.

Less than a year later plastics were first successfully applied to yarns and the results in increased tensile strength and in uniformity of size and smoothness of surface were regarded as phenomenal. It was also found to be possible to dye the yarns in any color in the same operation in which the plastic is applied. These processes were the invention of the author and are also owned by Dan River Mills, Inc.

Carrying the process still further in the Dan River laboratories, it was found that it could be applied successfully to slivers and rovings, which are loosely prepared strands of fibers from which yarns are made by the conventional processes of drawing, spinning, spooling, warping and twisting. The comparative gains in tensile strength were even greater than those obtained by treating conventionally spun yarns. These three processes comprise the basis of the Fiber Bonded processes developed and perfected by Dan River Mills, Inc., and which have been licensed to other textile manufacturers in the United States and in many foreign countries.

For practicing the Fiber Bonded treatment of textile fibers with plastics, it was necessary to design new types of machinery. These machines have been developed to the point that they apply the plastics to the yarn or roving, stretch it so as to bring the fibers to a more parallel position, and then cure the thin plastic film that surrounds the fibers, all in one continuous operation.

The synthetic resin formulations used in the treatment of Fiber Bonded yarns and rovings are under research. They may be varied at will so that, without affecting the basic virtue of increased strength, different characteristics may be imparted to the yarns as desired. Various types of glazes and finishes may be given to the yarns in the same operation in which the bonding agents and dyes are applied. The



STEEL HEDDLES

HEDDLE FRAMES

COTTON HARNESS

REEDS

SELVAGE HARNESS

MAIL HARNESS

MENDING EYES & TWINE

JACQUARD HEDDLES

SLASHER & STRIKING COMBS

EMMONS LOOM HARNESS STRAPPING

Mfgd. by B. F. Goodrich Co.

LAWRENCE, MASS.
Main Office & Plant
P. O. Box 927
'Phone—6194

CHARLOTTE
(Branch Plant)
George Field
Manager
P. O. Box 2036
'Phone—3-7503

NEW YORK
W. S. Taylor
52 Vanderbilt Ave.
'Phone—Lexington 2-6060

ATLANTA
Arthur Harris
P. O. Box 1982
'Phone—Main 2643

CHICAGO
Albert R. Breen
80 E. Jackson Blvd.
'Phone—Harrison 7140

DALLAS
R. D. Hughes Sales Co.
1812 Main St.
'Phone—C-6283; C-6284

A 10 IN 1 SERVICE THAT SAVES YOUR TIME AND ENERGY

When the E-Man calls, or when you call him, you can order as many as 10 DIFFERENT PRODUCTS from this one source—all second to none in quality. Think of the convenience and of the time and energy you save. This is a bonus in addition to the performance economy that Emmons Products assure.

Emmons Service is efficient in another way, too, in that there's an E-Man in your vicinity, no matter in which textile area you are located. His address and 'phone number are given here for your convenience. Get in touch with him the next time you need the products he offers.

EMMONS LOOM HARNESS CO., Factories in Lawrence, Mass., and Charlotte, N. C. Branch offices as listed.

EXPORT AGENTS: ARGENTINA: Storer & Cia., Chacabuco 443-49, Buenos Aires; BRAZIL: A. Polak, 216 Av. Beira Mar, Salas 403 a-d, Edificio Magnus, Rio de Janeiro and Rua Florencio, Abreu 157, Edificio Sao Bento, Salas 510 A.C., Sao Paulo; CHILE: W. L. Robinson, Casilla 4075, Santiago; COLOMBIA: C. E. Halaby & Co., Apartado 139, Medellin; CUBA: J. M. Perez Pena, Apartado 1611, Habana; MEXICO: Leo Lenk, Ave. Republica Guatemala 4, Mexico, D. F.; PERU: Constantino N. Sabal, Casilla 2288, Lima; VENEZUELA: N. Marvez, Apartado 391, Caracas; URUGUAY: Storer & Cia, Paysandu 1202, Montevideo.

EMMONS

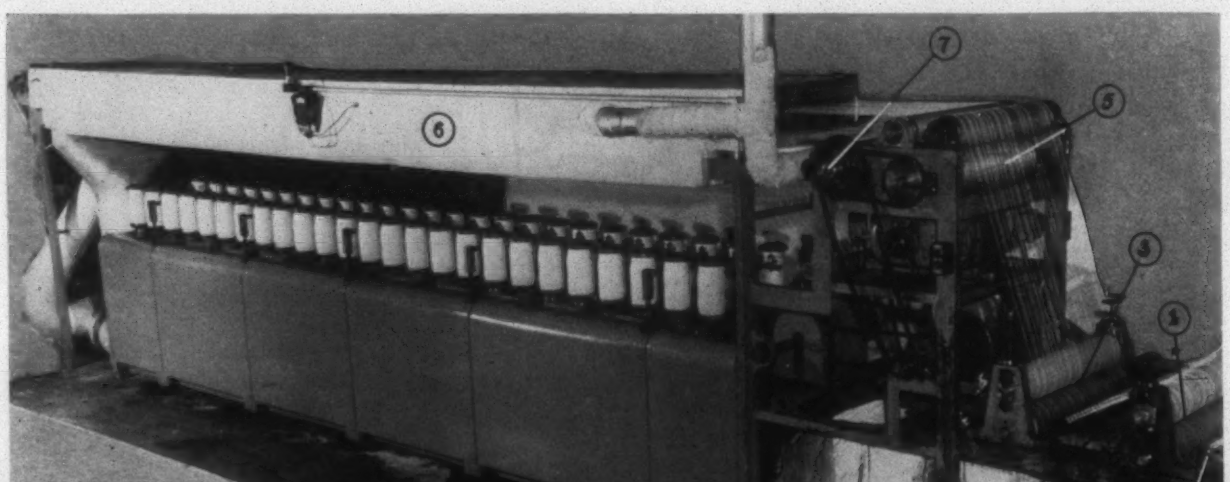
WEAVE ROOM ACCESSORIES

application of moisture resistant finishes, and of mildewproof and fire resistant finishes becomes a matter of selecting the correct formulations.

The extreme flexibility of the Fiber Bonded processes enables the manufacturer to fabricate textile materials designed specifically for a variety of functional uses without having to submit the materials to separate operations. The economies which result from the simplicity of the processes are obvious. Machines which handle a large number of multiple yarns and thus give volume production have recently been perfected and are in commercial use. The economic implications of these new processes cannot be clearly determined, but it is indicated that the processes will be important in the utilization of low grade cotton especially.

In the manufacture of cotton yarns the length of the staple or fiber is of the greatest importance. Short staple or low grade cotton will not yield a yarn of much strength by the purely mechanical methods of spinning and twisting. But it has been found that yarns and cords of high strength may be made from short staple cotton by the plastic or Fiber Bonded processes and are particularly adaptable to industrial uses. Thus, it should be possible to utilize a large percentage of the cotton crop which heretofore has not been suitable for the fabrication of strong yarns.

From these Fiber Bonded processes have already come a wide range of practical commercial applications, though as yet the potential uses of plastic treated textiles have only been partially explored. In *(Continued on Page 70)*



THE operation of this new 50-end Fiber Bonded machine, developed and built in the research engineering division of Dan River Mills, Inc., is as follows: From any conventional creel individual ends are led through an eyeboard to a positively driven set of rolls (1) and immersed in a treating bath. The untensioned yarn is led to a second positively driven set of rolls (3), moving sufficiently slower than the rolls (1) to facilitate slackening and thorough penetration of the treating material or bonding agent; and is again immersed in a treating bath (4) connected with (2) to maintain constant level in the two baths. The traveling yarn is stretched between rolls (3) and the positively driven roll (5) to just short of the breaking point, as described in the Fiber Bonded patent. Guide rolls are arranged to give maximum periphery contact in the V-grooves of the positively driven rolls and prevent slippage.

The now stretched yarn is carried through hot air drying chamber (6) and reversed for a second passage before being carried over positively driven roll (7) driven at a slightly higher speed than roll (5) thus taking out the stretch resulting from drying. The moving yarn is led from the guide rolls to individual take-up spools all operating on slip clutches driven sufficiently faster than the last positively driven roll to facilitate even winding. A single cam and traversing carriage operate the winding on all 50 spools.

Heating is accomplished by an oil burner (8) located under the treating unit for conservation of space. A heat exchange mechanism running twice the full length of the machine allows the same air to be re-circulated through the drying oven as the exhaust fumes are expelled. Variations in tensioning and compression zones can be arranged to meet the requirements on specific types of yarns, rovings, and sliver.

Announcement of the development of this machine came just before the recent annual meeting of the Textile Research Institute, Inc., at the Waldorf-Astoria Hotel in New York City, where an exhibit of some of the products of this machine, together with other products of Dan River research, were on display. The resin treatment process developed by Dan River Mills has become of international significance in textile manufacture, and is now being adopted by licensees in a number of other mills in the United States

Along with the resin treated textiles, Dan River Mills exhibited at the institute meeting examples of its resin-pigment dyeing process and of a very recent improvement in this process by which the brightness and deepness of shade of a dyed fabric is greatly enhanced though the dyestuff content remain the same. This latter development, which seems to hold great promise for the efficiency and economy of dyeing, is still in the laboratory stage.

You get all 3 with ARMSTRONG'S CORK COTS

YOU SAVE in three important ways when you run on Armstrong's Cork Cots. They are low in first cost. They reduce clearer waste as much as 50%. And because their extra friction carries this waste well back onto the clearer boards, they eliminate eyebrowing. Since there's no danger of waste dropping off or being nipped into the work, cleaner work results and less frequent clearer picking is necessary.

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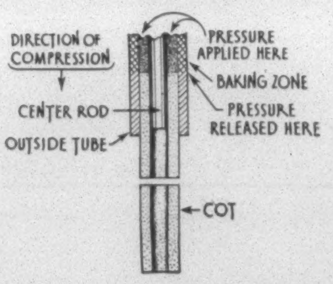

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IRREGULAR PAGINATION

Dyeing and Finishing

The A.A.T.C.C. Silver Jubilee Convention

WHEN the silver jubilee convention of the American Association of Textile Chemists and Colorists was opened Dec. 14 in the Hotel Statler at Boston, Mass., the more than 1,000 registered heard an announcement that Henry F. Herrmann of General Dyestuff Corp. had been elected president of the organization. Two new vice-presidents, also chosen by membership mail ballot, are C. Norris Rabold, director of research and development at Union Bleachery, Greenville, S. C., and John N. Dalton, chief chemist for the Pacific Mills Worsted Division, Lawrence, Mass.

J. Robert Bonnar, technical director of General Dyestuff Corp., was chosen to head the association's important executive committee on research, succeeding Leonard Little of E. I. du Pont de Nemours & Co., Inc., who has held the post three years, the maximum allowed under the organization's rules. Samuel L. Hayes, Southern manager of Ciba Co., Inc., and Mr. Herrmann, ex-officio, become members of the research committee.

The Thursday night dinner honoring charter and corporate members in the main ballroom of the hotel was presided over by George O. Linberg, E. I. du Pont de Nemours & Co., Inc. Presentation of the Olney Medal for outstanding achievement in the field of textile chemistry to William H. Cady, chief chemist of United States Finishing Co., was the highlight.

In addition, a portrait of Louis A. Olney, founder of the association and chairman of the research committee, was presented to Lowell Textile Institute by a group of alumni. Alan A. Claflin of Alan A. Claflin Co., Inc., made the presentation while Kenneth R. Fox, president of Lowell Textile, received it on behalf of the school.

Percival Theel, head of the department of chemistry and dyeing of Philadelphia Textile Institute, was toastmaster. P. J. Wood, past president of the association and technical director of Royce Chemical Co., reviewed the progress made by the association since its founding a quarter century ago with 13 members.

In presenting the medal to Mr. Cady, Dr. Olney termed his work on lightfastness of dyed and printed textiles particularly notable and declared he knew of no one who had spent more time over a longer period in the interest of the A. A. T. C. C. Previous recipients of the medal have been Dr. Olney himself and Milton Harris of Milton Harris Associates, Washington, D. C.

Research was the theme of two sessions Friday, with fundamental aspects of wool, cotton and synthetics covered in the morning, and applied aspects of research on the same fibers being dealt with during the afternoon. Abstracts of the six papers are presented in the paragraphs which follow.

"New Developments in the Chemical Modification of Wool," by Milton Harris—The great industrial importance of textile fibers stems from their wide range of mechanical properties. Thus, cotton finds widespread use in clothing and industrial fabrics because of its strength and durability; nylon and silk are used to make parachutes and women's hose because of a desirable combination of strength and elasticity; and wool finds its greatest outlet in fabrics of low bulk density, for which its permanent crimp and long range elasticity make it almost unique. The unusual properties of wool can be explained on the basis of a structure consisting of long, flexible polypeptide chains held together at periodic intervals by the disulfide cross-links of the amino acid, cystine. These cross-links have the important function of supplying tensile strength to the fiber as well as preventing plastic flow. On the other hand, they constitute what might be considered the "Heel of Achilles" of the fiber in that they are extremely sensitive to attack by alkalies, oxydizing and reducing agents, chemicals which are commonly used in the processing of wool.

Earlier work has demonstrated, however, that these unstable chemical cross-links can be stabilized by reconstituting them through a process involving the reduction of the disulfide groups with thioglycollic acid followed by alkylation with an alkyl dihalide. The reconstituted wool exhibits greatly increased resistance to attack by chemical and biological agents. Unfortunately, the process described above has many practical limitations such as the nearly prohibitive cost of the chemicals required, difficulties in handling thioglycollic acid, etc. More recently, a new process for constituting wool has been discovered. The process involves low-priced chemicals and is comparatively simple in operation. The details of the new process were described and its implications with respect to such practical processes as stripping, bleaching and vat dyeing were discussed.

"Fundamental Aspects of the Prevention of the Microbiological Degradation of Cotton Textiles," by Ralph G. H. Siu—As a result of intensive work on the problem by the Quartermaster Corps. and collaborating institutions, over 10,000 cultures of micro-organisms have been isolated from deteriorated cotton fabrics. Of these, over 100 species have been shown to possess cellulolytic ability. It is doubtful, however, whether all these are of considerable importance under field conditions. In attacking the cotton fiber, the fungal hypha penetrates the fiber wall into the lumen where it proliferates and digests the cotton fiber outwards. Bacteria, on the other hand, adhere to the outer surface and pit their way inwards. In both cases, the attack appears to be a highly localized affair with degradation occurring only at the point of the fiber in immediate contact with the micro-organism.

The organisms secrete cellulose-digesting enzymes. So far, these have been classified into two classes, viz: (a) cellulase, which converts cellulose into cellobiose; and (b) cellobiase, which converts cellobiose into glucose. Cell-free preparations of these cellulose-degrading enzymes have been actually made and their properties extensively studied. There are four general lines of approach to the development of preventive methods, viz: (1) physical prevention of organism from making contact with the cellulose molecule, as illustrated by the resistance of resin-impregnated cloth; (2) cell toxicants, as exemplified by fungicides; (3) specific enzyme inhibitors which exist today only in a state of theoretical possibility; and (4) chemical modification of the cellulose molecule, which appears to be very promising for future exploitation.

"Some Principles of the Structure of Synthetic Fibers," by Herman F. Mark—Valuation synthetic fibers must reprecent a *combination* of desirable properties. The most important of them are: high tenacity, high modulus, high elongation to break, resiliency, high softening point, resistance against chemicals, solvent, oxygen and light. It is not possible to combine *all* these properties in one fiber, but one can succeed in establishing a favorable balance of *some* of them. There is *one* requirement which is important for any of these combinations and this is a *sufficiently high molecular weight* of the material used for the spinning of the fiber. In addition to this, there seem to be *three* principles which permit the arrival at valuable combinations of fiber properties: *crystallization, copolymerization* and *crosslinking*. It was shown how the application of these principles makes it possible to obtain fibers with interesting commercial qualities.

"Theory and Practice in Wool Dyeing," by Frederic L. Goodall—The usual recommendations for dyeing acid wool colors have remained basically unchanged for upwards of three-quarters of a century. With modifications of the nature of the acid or acid-reacting substances according to the dye, they are applied to all acid and acid-chrome dye. The recommendations depend upon the following principles: (1) that acid is necessary in order to make the color exhaust; (2) that the stronger the acid, and the greater its concentration, the more rapid the rate of exhaustion; (3) that the presence of Glauber's salts retards the rate of dyeing; and (4) that the lower the temperature, the slower the rate of dyeing. These general principles were supposed to be valid for all types of acid colors and successful dyeing is the result of appropriate combination of these diverging principles so that the dye passes from the dye bath to the goods at so slow a rate that the goods are uniformly dyed, and yet sufficiently rapidly to complete the process within an economic time limit. In a rather special case of the easily leveling acid colors, migration properties are, of course, an important factor contributing to successful results.

From the start of acid dyeing of wool, theory made strenuous efforts to explain phenomena familiar to most practical wool dyers. It is, however, only within the last 20 years, with newer methods of research, wool dyeing theory seems to lag far behind practice, and in the last ten years, it has so nearly caught up with practice that it can occasionally, and perhaps very cautiously, predict the results of unusual methods and point the way to future development. This has arisen as the result of better insight into the two essentials of the wool-dyeing problem—the wool and the dye—and into what happens to each of the aqueous surroundings necessary for dyeing. The theoretical and practical aspects of the four principles outlined above, together with discussion of various dyeing phenomena familiar to most practical wool dyers, were discussed and exemplified.

"Fundamental Principles Applied to the Elimination of Fire Hazards of Fabrics," by Sidney Coppick—In recent years, the potential fire hazards of some fabrics has been forcibly brought to the fore by a series of disasters. In civilian life, the Cocoanut Grove night club fire and the large percentage of casualties suffered by military personnel during combat are striking examples. Although admittedly fabrics alone cannot be held directly responsible for the large loss of life and property, they are undoubtedly a contributing cause. Experimental data substantiates the theories that fire prevention is generally not a simple physical coating phenomenon. The actual chemical process of fabric combustion is involved and the catalytic directionalization of the course of this chemical reaction appears to be the major requirement for a protective treatment.

The ideal situation for a non-flaming thermal decomposition reaction, in the case of cellulose, is where all of its combustible carbon is retained in the molecular solid state. This may be approached practically by use of dehydration catalysts as flameproofing reagents. Here, thermal fission of cellulose proceeds to carbon and water alone rather than towards the normal production of fragmentory carbonatious residues, which are evolved as flammable tars. It is the vapor phase cracking of these molecular chains which constitute the flaming interface. Fabric damage sustained by instigating flame sources is not confined to the self propagation of the flaming reaction. A flameless combustion may proceed via glowing. The glowing phenomenon is definitely associated with the direct oxidation of carbon and it is through a thermodynamical study of the reaction kinetics of the oxidation of charred residues from fabrics that the mechanism of afterglow prevention has been elucidated. Application of fundamental principles to the well known and the more recently developed permanent flame and glow retarding finishing processes were described and discussed.

"Practical Problems in the Manufacture and Service of Tires Filled with Continuous Filament Cords," by John H. Dillon—This paper constitutes

(Continued on Page 66)

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THE TIPPY DYEING OF WOOL AND ITS CONTROL—First Prize

Presented by NEW YORK SECTION

TIPPY dyeing of wool occurs in several forms, the first and most serious being those dyeings in which the tips of the fibers are heavily dyed while the body sections remain undyed or are only lightly dyed. A second variation is obtained when two or more contrasting colors are used to produce a shade, resulting in pronounced variations in hue and color value between the tips and body portions. A third and less troublesome effect is caused by the tips remaining undyed or lightly dyed, while the body portions are heavily dyed. Some of these extreme contrasts are reduced when the stock is carded and combed, but these operations cannot entirely eliminate these defects and therefore skittery, frosty or heathery effects are obtained. Tippy dyeing has long been recognized as a major problem and in the past many attempts have been made toward a solution. Corrective methods suggested by von Bergen, Westbrooke, Speakman and O'Day are all limited in their effectiveness and therefore have not found widespread application. The need for minimizing or eliminating tippiness has greatly increased in the past few years due to the consumer's demand for higher quality. Also it has been further aggravated by the greater proportions of foreign wools now in use. Due to the inadequacies of previous recommendations, this problem was selected as a basis for intensive study, and, as a result of extensive laboratory and dyehouse research, improved and practical corrective measures have been developed.

It is well known to every wool dyer that Amido Naphtol Red 6B (C. I. No. 57) and Wool Green S (C. I. No. 737) are perfectly level dyeing types, and it is also known that Fast Red A (C. I. No. 176) and Alizarine Sky Blue (C. I. No. 1088) do not dye so level as the first two products. However, on tippy wool the latter two produce uniform dyeings, while the level dyeing types dye very tippy. Therefore, a dyestuff which is known to be level dyeing is not necessarily suitable for tippy wool. This is emphasized to show that the dyer unfortunately cannot apply his knowledge of the level dyeing properties of dyestuffs to their working properties on tippy wool.

More than 650 individual acid and chrome dyes were tested and rated for their dyeing properties on tippy wool and mohair. These tests involved over 4,000 dyeings. The resulting ratings were tabulated. Use of this comprehensive table now makes it possible to obtain improved results by proper selection from a range of dyes rated for their tendency toward tippiness. Therefore, it will be found of great value to the woolen industry. It should also prove of particular value in the case of shades requiring a combination of dyes, as a proper selection will make it possible to avoid the production of pronounced hue differences between body and tips. The tests indicated that variations in relative tippiness obtained with certain dyes, particularly chrome colors, occur frequently according to the procedure used. In certain cases, therefore, improvements in tippy dyeing can be obtained by variations in dyeing techniques. Generally speaking, it was found that dyes applied by the topchrome procedure produced better results than when dyed metachrome. While procedure changes may be of considerable help in some instances, they do not lead to a general solution of the problem.

The scientific fact that the sunlight damage of the wool epidermis is accompanied by a break of the sulphur linkage was confirmed coloristically. Further tests showed that relinking of the cysteine side change will not prevent tippy dyeing. Therefore it was necessary to investigate other methods for the prevention of tippy dyeing. Recently various agents have appeared on the market which were reputed to correct this condition. Since products of this nature had never been objectively evaluated, it was decided to investigate this field. Of the many materials tested, several showed considerable promise and from these, four were selected for mill tests. These tests showed that in all cases use of the selected agents resulted in nearly perfect coverage.

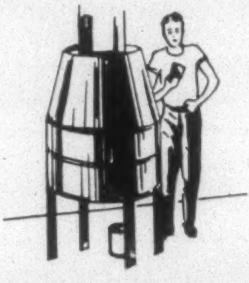
EFFECT OF DYESTUFFS ON THE TEMPERATURE RISE OF FABRICS EXPOSED TO LIGHT—Second Prize

Presented by PHILADELPHIA SECTION

THE heating effect of sunlight is due to the absorption of radiation principally in the infra-red and, to some degree, in the visible region. In view of the fact that such radiation absorbed by a textile results in a temperature rise, an investigation of the variations in such a rise as related to the light-absorbing characteristics of the dyestuffs used was undertaken. The results would be indicative of the importance of a choice in the selection of dyestuffs for summer wearing apparel in the direction of minimum temperature rise and for winter wearing apparel in the direction of maximum temperature rise. Likewise, dyestuffs applied to tentage, tarpaulins, awnings and other fabrics for outdoor use perhaps should be selected on the basis of their effects on the temperatures of these textiles when exposed to the sun.

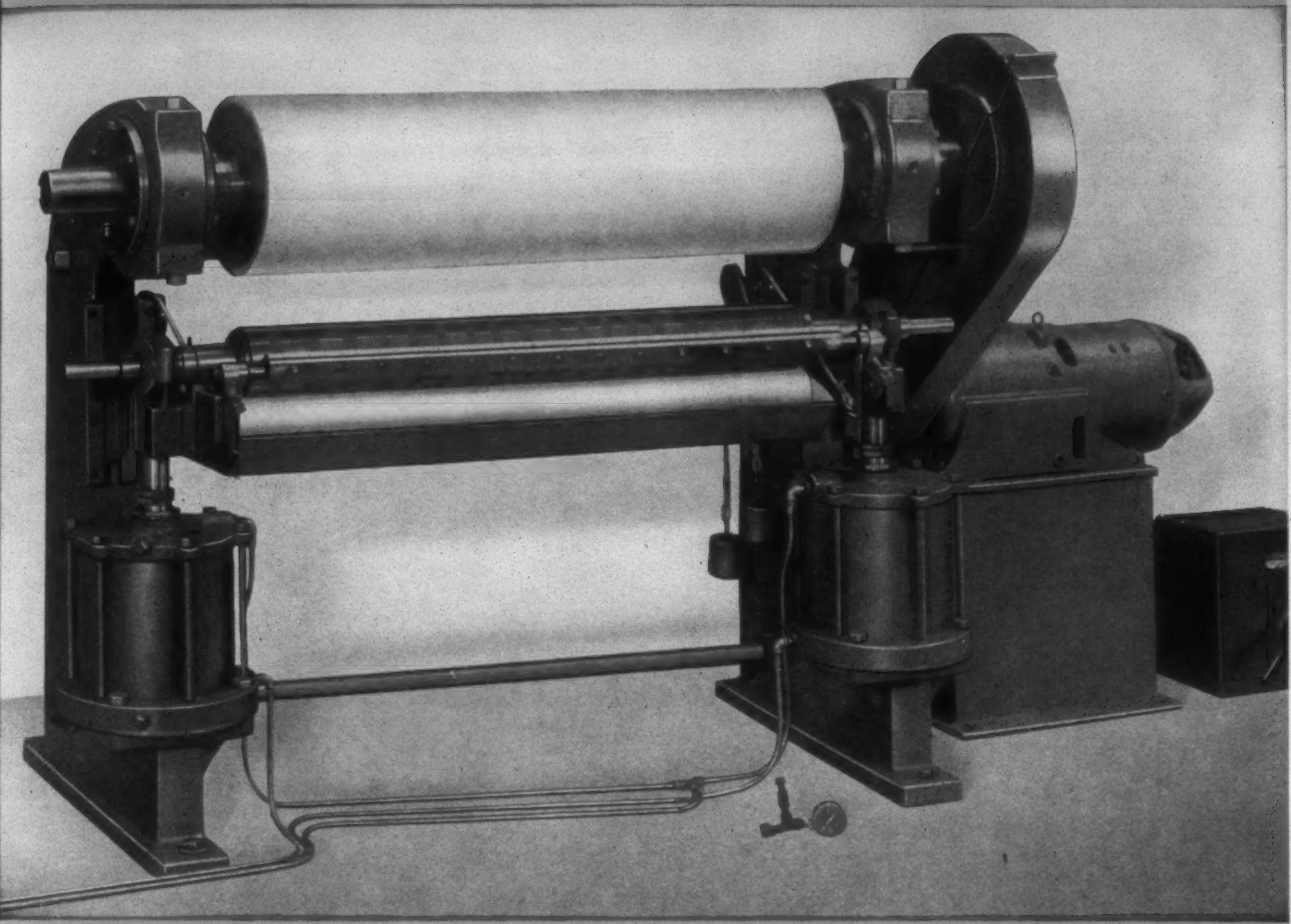
In order that consideration might be given to the principal fibers used in the construction of fabrics to be tailored into garments, three fabrics were selected as standards to which the dyestuffs of specific infra-red reflectance would be applied. A fabric representative of that used for awnings, tarpaulins and tentage was also included. These fabrics were: (1) cotton poplin (6.5 ounces per square yard); (2) wool flannels (6.4 ounces per square yard); (3) delustered viscose rayon lining cloth (2.9 ounces per square yard); and (4) cotton duck (11.3 ounces per square yard).

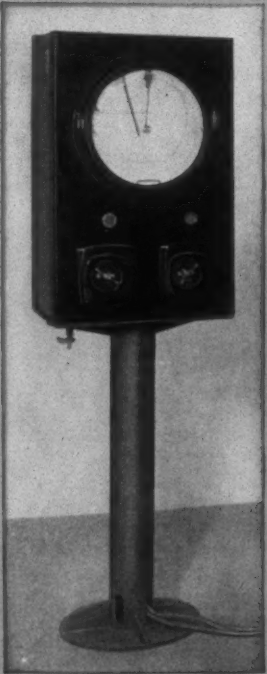
Measurements were made at a wavelength of 1,000 millimicrons of the reflectance of a wide range of dyestuffs suitable for application to each of these fabrics. This permitted classification of the dyes into groups exhibiting high, medium or low reflectance. None of the direct cotton and insoluble azo dyes were found to be low reflecting. However, several vat and sulfur dyes were low reflecting. Thus, it was evident that fabrics composed of cellulosic fibers; e.g., cotton and rayon, could be dyed with either low or high reflecting dyestuffs. On the other hand, all the dispersed acetate dyes were high reflecting and, for this reason, no acetate dyeings were included in this study. Of the wool dyes, the chrome blacks and Naphthol Green B were low reflecting. In general, the other azo dyes and the anthraquinone acid dyes were high reflecting. Several dyes of intermediate reflectance were also available. On the basis of these data, selections were made for each fabric of shades which could be produced with dyestuffs of low reflectance. Dyeings made with these dyes were then approximately matched in daylight with dyestuffs of high infra-red reflectance. All dyeings were made by conventional methods.



To investigate the possibility of a relationship between the temperature rises of fabrics on exposure to radiant energy and the light-reflecting properties of the dyestuffs applied thereto, a method for measuring the temperature of textile materials was devised.

While the measurement of the temperature rise caused by the absorption of heat from the rays of the sun was of primary interest in this investigation, it was evident that energy from the sun was not only insufficiently constant in intensity but also was available for only brief periods of time. Because of these objections, consideration was given to other sources of artificial illumination. Ultimately, photoflood lamps of the type commonly used today in photography were selected for this purpose. Measurements were made of the temperature rise of the dyed fabrics upon exposure to sunlight and to the photoflood lamp, and these measurements were compared with the light reflectances of the same fabrics. This study indicated to a striking degree the fact that the use of dyestuffs of low versus high reflectance characteristics, particularly in the infra-red region, results in substantially different thermal behavior upon exposure either to sunlight or strong artificial illumination. That is, the same cotton fabrics dyed to approximately the same shade when exposed to light will vary several degrees in temperature depending upon the reflectance characteristics of the dyestuffs. This fact may have important practical significance. For example, cotton and rayon clothing can vary several degrees under these conditions, due to the reflectance characteristics of the dyestuffs alone. The same factor can similarly influence the temperatures inside tents, below awnings and under tarpaulins. Considering wool garments, where warmth rather than coolness is usually desired, differences of as much as





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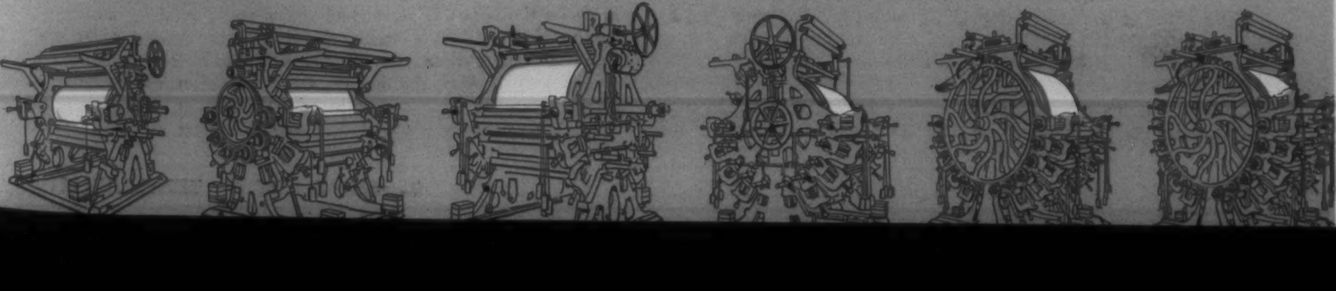
Illustrated below, left to right, are the Butterworth 4-color, 6-color, 8-color, 10-color, 12-color, 14-color Printing Machines.



five degrees can be expected by the selection of dyestuffs of low versus high reflectance. It is hoped that the report of this preliminary investigation will induce others to study the subject more thoroughly, particularly from the angle of determining whether human comfort in clothing can be improved by intelligent selection of dyestuffs on the basis of their reflectance characteristics.

THE REPLACEMENT OF STARCH IN FINISHING OF TEXTILE FIBERS & FABRICS—Third Prize

Presented by RHODE ISLAND SECTION

THE advent of resins, particularly the urea-formaldehyde type, for creaseproofing spun rayons and lightweight cotton fabrics in the early 1930s served as a milestone in the textile finishing industry. Later in the same decade, certain acrylate and alkyd resin types were introduced, marking a definite advance in the large-scale use of synthetic resins for the replacement of starch in the finishing of textile fibers and fabrics. During the past five or six years, we have witnessed the widespread use of melamine, vinyl, and even some styrene types for special-purpose finishes; but there has been no material that may be classified as a generally satisfactory replacement of starch.

A careful sifting of all potential replacements of starch was made in a search to discover those, either new or old, which might be deserving of further study. Laboratory investigations proved conclusively that replacements which fell into this category were indeed few and far between. Properties which this committee felt to be of paramount importance in any new product that might be used as a starch replacement are listed in their suggested order of importance: (1) good availability at a reasonable cost, (2) no reaction as a skin irritant or sensitizer, (3) ready removability from fiber or fabric, (4) tensile strength should not be impaired, (5) no effect on printed or dyed shades, (6) no effect or an improvement in the light, fastness of dyestuffs applied to textile materials, (7) no yellowing of white goods, and (8) no odor development in finished fabrics.

Working with the above list as a criterion, we discovered in our extensive survey of materials that only two new types of products showed any great promise of success in meeting these rather stringent specifications. These two newcomers to the textile finishing industry are the water-soluble styrene and alkyd resin compounds. Since each of these two types of resin compounds has a composition that lends itself to further polymerization, combination with other products, or to cross-linking polymerization, a study was instituted to determine the value and advantage of such properties. After extensive laboratory testing of many materials, plant trials were run on four combinations, using a linen-type spun rayon and several cotton fabrics. These were: (1) water-soluble styrene resin plus melamine formaldehyde resin, (2) water-soluble styrene resin plus a quaternary ammonium compound, (3) water-soluble alkyd resin plus melamine formaldehyde resin, and (4) water-soluble alkyd resin plus a quaternary ammonium compound.

It was found that solutions of styrene resin may be mixed with melamine-formaldehyde to produce stable application baths. Finishes developed with such combinations are satisfactory for both cottons and spuns. In general, good durability to laundering is achieved on both fibers, and shade changes are about the same as with the melamine-formaldehyde alone. It is well known that urea-formaldehyde and melamine-formaldehyde resins cause a loss in abrasion resistance on spun rayons. Combinations of these products with the styrene compound reduced this loss to a minimum and in some cases showed an actual gain. In our search for compounds which would tend to fix the styrene resin, the discovery was made that a quaternary ammonium compound had the power to combine in such a manner as to yield excellent durability. Cottons and spuns may be finished either by a single bath, or by a two-bath process.

Mixtures of the water-soluble alkyd resin with melamine-formaldehyde resin yielded durable finishes on cottons and spuns. Like the styrene resin, the alkyd showed a surprising ability to counteract the decrease in abrasion resistance on spuns produced by melamine-formaldehyde resin. In sharp contrast to the combination of styrene resin with the quaternary ammonium compound, the corresponding mixture of the latter with the alkyd resin resulted in resin precipitation in the bath. Because of this fact, a two-bath process was used to produce the desired results.

From the work accomplished to date we are able to draw the following definite conclusions: (1) Two new water-soluble type resins have been evaluated, which may be used to replace starch in finishing and warp sizing. As a general rule, in fabric finishing two per cent styrene resin or three per cent alkyd resin produces a hand equivalent to five per cent pearl cornstarch. (2) Durable finishes may be produced by combinations of these and melamine-formaldehype type. They have the further advantage in these combinations of minimizing loss in strength and abrasion resistance. (3) A quaternary ammonium compound in combination with the styrene resin produced a durable finish in a single-bath process. A two-bath process is indicated at present to yield a similar result when the alkyd resin is used in conjunction with a quaternary ammonium compound. (4) Both the styrene and alkyd resin types have given some indications of suitability as warp sizings. The styrene type shows particular promise and appears to have an advantage over starch in not being affected by humidity.

AN EVALUATION OF THE KUPENSAURE PROCESS

Presented by PIEDMONT SECTION

SINCE the year 1925 the production of rayon has increased over eight times. During the same years as above the production of vat colors has increased 14.4 times. Since the use of vat colors has increased, it is believed that any aid that can be given to the textile colorists in regard to vat color application is now timely and will continue to be of interest and importance to the textile industry. The Kupensaure process is a new development in vat color application which originally was developed in Germany. Recently an investigation has been made to evaluate this process and to determine whether it can be used to advantage in the application of vat colors to synthetic and natural fibers.

The procedure for preparing the Kupensaure vat is as follows: First a stock vat is prepared with caustic soda and sodium hydrosulfite. Then, if weaker concentrations are to be used, it is diluted, prior to acidifying, near to the final concentration. Thereupon, it is neutralized by means of the necessary quantity of acetic or formic acid, calculated upon the quantity of caustic soda solution used. Too much acid is not detrimental, but the neutralization should never be carried out incompletely. A pH of 5.5 is desirable. The neutralization is best carried out by adding at once all the partially diluted acid while agitating well.

A typical formula for a stock vat is as follows: 1-6 grams of vat powder fine; 5-10 cc. caustic soda solution 40° Be.; 3 grams of hydrosulphite; 2-5 grams of Setamol WS (dispersing agent); bulk to 300 cc. with water at 50-60° C. and allow to stand for 3-5 minutes before diluting.

For diluting this stock vat, the following is a typical formula: 1 gram Setamol WS, with the dyestuffs of vat blue group; 1 cc. of Peregal OK, with vat blue BC; 1-2 grams Igepon T in; 650 cc. of water at 70-80° C.; 6-12 cc. acetic acid 56 per cent diluted to 50 cc.; finally add 1-2 grams Nekal BX and filter through fine fabric.

The vat acid solution may be heated without difficulty to 70-80° C. In view of the greater penetration power, however, lower temperatures will suffice in many cases. When using the usual paste or powder brands, the quantity of Setamol in the stock vat is preferably increased by about 50 per cent. Furthermore, with the powder brands the vatting must be prolonged 10-15 minutes. Padding with the Kupensaure vat is the same as with the pigment process. However, in view of the better penetrating power of the vat acid padding solution, it is possible, however, to reduce the number of passages in the subsequent jigging. It is important that the goods to be padded must be rinsed thoroughly to be free of any alkali.

Working conditions for the developing process are, likewise, the same as for the pigment padding process. On account of the high speed of the development of the vat acid, the number of ends can be reduced against those padded with the pigment. Actual practice has shown a saving of up to 50 per cent in the number of required jig ends.

Approximately 60 different vat colors have been tested in the laboratory for application by the Kupensaure process, and the results tabulated as to the suitability of the process with each of these colors at high and low concentrations. During the period that this experimental work was under way, practical runs were also being made on thousands of pounds of cotton yarn. Mill reports on vat green and vat yellow show that the Kupensaure process gives more uniform dyeings throughout the package than by any other method of vat dyeing. Also, the dyeings are more uniform from batch to batch.

In checking many practical demonstrations that have been made

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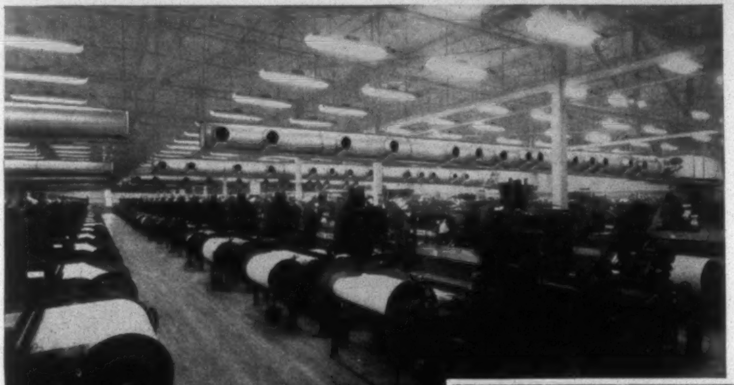

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to date in the plants that are now using the process on special shades and colors, it is very apparent that this method will not revolutionize our present procedures, nor is it entirely adaptable to the wide range of vat colors on the many machines and fabrics that are being processed. On the other hand, it does add to our regular procedures a new method which in many cases will solve a problem in the application of certain dyestuffs to a better degree than the present methods in use. Further investigation may well prove that by the use of this process or variables of the principles involved, additional future problems, in the field of vat color application, may be more easily solved.

A STUDY IN DETERGENCY

Presented by NORTHERN NEW ENGLAND SECTION

IN the light of the high price of soap, as well as its scarcity, the wool textile industry is faced with the problem of selecting suitable alternatives, among which are the synthetic detergents, but they require proper evaluation from and economy and quality standpoints compared with soap.

Ten per cent of each detergent with six per cent of sodium carbonate to give an initial pH of about 11.0 produces excellent over-all results in oil and lampblack removal, the soil standard set up for the tests. The wool knitted tubing used contained five per cent carbon tetrachloride extractables and showed a reflectance of 11 per cent. Effects of several factors are listed in the paragraphs which follow.

Effect of Concentration of the Detergent—There is a definite relation between a limiting concentration of detergent used and the efficiency of the scouring. For each detergent there is a critical value between five and ten per cent which produces the best over-all results.

Detergency Comparator—In general it appears possible by the use of this machine to demonstrate relative efficiencies of different detergents and conditions of scouring.

The Bath Ratio—This is an important consideration in a laboratory study of detergents, as mill scouring operations are usually carried out in short baths. In our laboratory machine it was not feasible to go much lower than a bath ratio of six to one.

Effect of Sodium Carbonate—The effect of adding sodium carbonate to the detergents is striking. For example, changing the amount from about two per cent to 22 per cent has a decided effect upon the reflectance measurements in the long bath (22 to one) scouring of all the detergents, the greatest effect being upon the soap.

Effect of Sodium Bicarbonate—Addition of sodium bicarbonate has an effect on all the detergents similar to that of sodium carbonate.

Effect of Sodium Sulphate—This salt definitely has considerable effect on both the oil removal and reflectance, giving much better results than when the detergents alone were used.

Effect of Sulphuric Acid—Occasion does arise in mill practice for scouring sulphuric acid carbonized cloth without prior removal of the acid. Apparently the non-ionic detergent gives the best results as to oil removal, although the reflectance measurement is somewhat low.

In this study of detergents we have developed a reproducible method for evaluating them as used in the mill under a variety of conditions. For this purpose, we selected the Detergency Comparator developed by the wool detergency subcommittee of the research committee of the American Association of Textile Chemists and Colorists. This apparatus is a miniature wool dolly washer made to scale from the usual mill washer. It provides a means of running duplicate tests simultaneously with a variation of the ratio of scouring liquor to cloth from six to one to 25 to one as desired. In addition, the temperature of both the scouring liquor and rinse water are thermostatically controlled.

In selecting synthetic detergents to compare with soap in the apparatus, we selected three chemical types—anionic, cationic and non-ionic. For the anionic type, we selected the sodium salt of an alkyl aryl sulphonate, for the cationic type, a polyethylene ether of a fatty amino while the non-ionic was a polymerized organic alcohol with ether linkages. The soap selected was a red oil soap of 95 per cent soap content and ten degree titre. These various detergents were compared without any scouring assistant and also with the following: sodium sulphate, sodium carbonate, sodium bicarbonate and sulphuric acid.

The wool material used in the tests was a 1¼-inch tubing fabric knitted from 2/40 worsted yarn of five months' age made from stock oiled in the worsted gilling process with the National Association of Wool Manufacturers standard top lubricant, a blend of 50 per cent mineral oil and 50 per cent grease oil.

By means of reflectance measurements with the General Electric recording spectrophotometer, the amount of lampblack left in the fabric was indicated and, together with a Soxhlet extraction test for oil in the scoured fabric, gave sufficient information to evaluate the scouring properties of the various detergents.

The knitted tubing was conditioned in a standard atmosphere and 76-inch strips under 1½-pound tension were out to provide samples of uniform length and weight. Duplicate samples were run in the dual detergent baths for 30 minutes at 100 to 105° F., rinsed, removed from the machine, and dried.

HOW MINERAL CONTENT COTTON CAN EFFECT BEAM DYEING WITH VAT COLORS

Presented by SOUTHEASTERN SECTION

RESEARCH carried out recently has demonstrated that the mineral content of some cotton is capable of producing uneven dyeings when yarn spun from such cotton is dyed on dye beams with vat dyestuffs. Boiling out the yarn with acetic acid removes much of the mineral matter and permits even dyeing to be obtained. Although this investigation was limited to beam dyeing of single cotton warp yarns of numbers 26s to 40s, it is suggested that the mineral content may be a factor worth considering in dyeing cotton in other types of equipment.

Since the rate of flow in either beam or package dyeing is a major factor in producing level dyeings with the relatively rapid exhausting vat dyes, it is essential in beam dyeing that this rate be maintained at the maximum the yarn will withstand without channeling. Any condition which reduces or retards this rate of flow will tend to produce uneven dyeings. A condition of this nature existed at the textile mill under consideration in this research. After dyeing, the outside and inside windings from the beams were invariably dyed a darker shade than the middle windings.

The cotton being dyed may be classed as a good character raingrown cotton, 1 1/16-inch staple, and middling grade. All beams seemed to have a uniformly firm, but not too hard, winding. In dyeing, both cold-and-hot dyeing anthraquinone vat colors were being used. The variation in the depth of shade from beginning to end in the dyed beams was sometimes ten per cent more. In each individual dyeing there was a noticeable deposit of some insoluble matter on both the outside and inside winding. The shade was always dull and somewhat lifeless from these windings, but between these two extremes the dyeings were quite clear. This deposit persisted despite changes in dyeing procedures; these changes included various combinations of several penetrants, detergents, retarding agents, and recommended phosphate materials. A preliminary study indicated that the water being used was not the cause of the uneven and dull dyeings.

A typical dyed beam was selected having about the average amount of deposit on the outer windings. The shade was a pastel lime color largely made from Flavone GC. A sample of yarn from the outer winding was taken and an ash analysis was made. From these analyses it was evident that a deposit of considerable body was filtering out on the outside and inside windings of the beams during the dyeing process. This deposit was quite insoluble and difficult to remove, since it remained on the yarn after much washing and scouring at temperatures near the boil. Further, this deposit was retarding the flow of dye liquor through the beams to the extent that the middle windings from the beams were being dyed a lighter shade than the windings from the outside and inside. A check was made after each step in the dyeing process to determine where the deposit first appeared. This was found to be shortly after the caustic soda was added, which indicated that the formation of insoluble hydroxides of calcium and magnesium was the beginning of the trouble.

It was believed that if the calcium and magnesium being precipitated on the yarn was actually coming from the yarn and not from the water supply, removal of this material in the preliminary boil out of the yarn should correct the trouble. Dilute acetic acid should convert the calcium and magnesium to soluble acetates which could easily be washed out of the yarn. Accordingly, some of this yarn was given a boil-out with dilute acetic acid at 180° F. Chemical analysis of the water prior to boiling out the yarn, after boiling out with a penetrant, and after boiling out with acetic acid showed that the acetic acid treatment removed considerably more mineral matter from the yarn than did the regular boil-out with a penetrant. It is also an actual fact that the beams boiled out with the acetic acid no longer showed the dirty deposit on the yarn after dyeing.

SOME ASPECTS OF ACETATE RAYON SAPONIFICATION

Presented by SOUTH CENTRAL SECTION

DURING the last 25 years many acetate rayon fabrics have been dyed by means of saponification and the use of direct cotton colors. A study made in 1935 or 1936 of discharge printed crepes having an acetate warp and viscose filling showed a definite lack of control of the saponification process as it was then being carried out. For example, whereas the normal acetyl content of cellulose acetate rayon is 39.25 per cent, it was found that four pieces of fabric from one finishing plant were saponified to different degrees ranging from 18.3 to 30 per cent acetyl content. Further inquiry showed that there were just about as many variations in the saponification process and the agents used as there were finishers.

Although the saponification reaction itself is a simple one involving the splitting of an ester by a hydrolyzing agent, there are many variables which affect the speed and extent of the reaction with a resultant effect on the dyeing properties and fabric properties of the finished goods. An investigation was undertaken to study the effect of some of these variables on the saponification reaction and to determine the optimum conditions for saponifying cellulose acetate so as to obtain the desired extent of saponification in the shortest possible time and with a maximum of control over the reaction.

Preliminary experiments indicated that caustic soda would be the best reagent to use for the purpose of this study, since it could be easily handled, easily titrated, and the reaction was rapid. Also it was found that the use of sodium hydroxide alone was conducive to surface saponification which is generally desirable. Preliminary tests demonstrated the great rapidity with which the saponification reaction takes place at temperatures ranging from 49° to 83° C. with an excess of alkali present. Most commercial processes attempt to saponify the cellulose acetate approximately ten per cent. At 83° C. and at 72° C., this point is passed in less than one minute, which means that any process employing an excess of alkali and high temperatures would be very difficult to control.

Next, four series of tests were run in which the amount of caustic soda was varied from two to 100 per cent based on the weight of the cellulose acetate. Temperatures of 49°, 59°, 72° and 83° C. were adhered to, and for each series the time was held constant. These tests showed that with a fairly high concentration of caustic there is little effect on the acetate at temperatures below 59° C., but at higher temperatures the reaction begins almost at once. Curves were plotted which may be used in selecting the proper conditions of time, temperature and concentration so as to obtain the desired amount of saponification most economically and with the greatest possible control. The per cent saponification obtained when using ten per cent caustic soda on the weight of the cellulose acetate at different times and temperatures is shown below.

Temp.	2 Min.	5 Min.	10 Min.	20 Min.
49° C.	0.0	0.0	0.0	2.9
59° C.	0.0	0.0	0.0	7.1
72° C.	1.4	1.7	8.4	11.2
83° C.	. .	2.4	8.8	16.4

Further tests showed that it is entirely unnecessary to carry saponification to extremes. It was found that if cellulose acetate rayon is saponified to an acetyl value of approximately 37 to 38 per cent that the same shade with Cotton Blue FF will be obtained as with viscose rayon. The acetyl values are average values for the whole cross-section of the fiber and do not represent the acetyl content of the saponified outer layer.

Still further tests showed that a number of alkalies other than caustic soda can be used and that the resultant saponification depends on the nature of the alkali and not on the pH of the solution. Agents which give a preponderance of surface saponification are caustic soda, soda ash, trisodium phosphate, triethanolamine. On the other hand, ammonia under pressure, and ethylene diamine give a diffuse type of saponification. It is believed that saponification by these and other agents can be controlled to any desired degree by the proper attention to time, concentration, temperature, and the nature of the saponifying agent.

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There Must Be a Limit

Cotton mill wages in the South are today far above those which were, in years past, ever thought to be possible.

There have been six advances in textile mill wages, most of them under the pressure of the war emergency, when any loss of production would mean that the men in our armed forces would not have the textiles necessary to their safety and health.

The unfortunate thing about a labor union movement is that when members of the union lose interest, many cease to pay dues and the organizers and the little local collectors find their "takes" dwindling.

In order to revive interest and bring the collections of dues back to par, the union leaders have to bring forward some idea and this time they have made a demand for still higher wages.

Textile goods are to a large extent purchased by housewives and there is a limit to the amount which they can afford to pay.

If some of the male members of the C. I. O. or the A. F. of L. will go to the stores and ask the price of goods and clothing they will be astonished at what they must pay today.

The prices are the direct reflection of the six wage advances which have already been made and another wage advance would send prices of goods still higher.

It is true that the unions recently forced New England mills to advance wages 10 per cent but it should be realized that there are very few mills in New England manufacturing print cloths or sheeting or ordinary grades of carded or combed yarns.

Most New England mills manufacture specialties where style determines the price and where goods are not sold in volume.

In 1923, New England had over 21,000,000 cotton spindles but today it has about 4,700,000 and the number is still shrinking.

The drop from 21,000,000 to 4,700,000 spindles means that several hundred thousand people who formerly earned their living in cotton mills have had to seek other employment elsewhere and they can rightfully blame labor union leaders and racketeers for the enforced change.

Print cloths, sheetings, carded yarns and other staple goods which are produced in large volume in the South cannot be sold in normal times at prices which will make it possible to pay even the wages which are in effect today.

When buyers balk at the prices of cotton goods, and cease to make purchases there will be a day when mills must close for lack of orders and extensive unemployment will exist.

There must be a limit to the wage scale in textile mills and it seems to us that the limit has already been reached.

In the midst of the depression in 1931, textile mill employees, in order to get enough food with which to live, were willing to work for any wages which mills were able to pay.

Some mills took advantage of the situation and paid $5.00 to $6.00 per week.

Those who were readers of TEXTILE BULLETIN at that time know that we did not hesitate to print the names of those mills and express our opinion of them.

We welcomed reasonable advances in textile wages and are pleased that conditions which have prevailed have made them possible.

Textile wages are now excellent and to ask for further advances is unreasonable and may bring about a situation which will start a downward spiral in both prices and wages. It is often advisable to let "well enough" alone.

Business will probably be reasonably good throughout 1947 but the day will certainly come when, with a depression upon this country, mills will find themselves without orders and employees without employment.

The employers who employed people for $5.00 per week in 1931 were no more grasping than the textile employees who demand higher wages today.

The employees, just as the employers, wish to see business continue upon an even keel and should hesitate before forsaking a good situation for one of uncertainty.

The Columbians

We hold no brief for The Columbians, which were recently organized at Atlanta, Ga., nor do we know any persons connected with that organization.

We do know that the most active opposition to The Columbians has come from James H. Sheldon of New York and his Anti-Nazi League.

Dr. Sheldon, as he calls himself, was listed as a member of the national committee of the American Committee for Struggle Against War, an immediate forerunner of the American League Against War and Fascism, which in turn dissolved into the American League for Peace and Democracy. He was active in the League Against War and Fascism, which the Dies Committee classified as a communist front in the United States. One purpose of this league was to stop the manufacture of munitions and other materials for war, by violent methods.

The head of an organization which sought to prevent munitions of war being manufactured for our soldiers appears as Enemy No. 1 of The Columbians.

That is the only favorable thing we know about them.

No Contact Required

Just as soon as a labor union wins an election, which is not often these days, it demands a contract and it is their custom to assert that the Wagner Law requires that a contract be signed.

The National Labor Relations Board, both nationally and locally, goes just as far as it can to force the employers to sign contracts with unions and in some cases orders the signing.

The Wagner Law does compel collective bargaining *negotiations* but it does not require an employer to sign a contract.

In the debate prior to the enactment of the Wagner Law, Senator Wagner said:

> It does not compel anyone to make a contract of any kind if no terms are arrived at that are satisfactory to him. The very essence of collective bargaining is that either party shall be free to withdraw if its conditions are not met.

In November, 1936, which was after the enactment of the Wagner Law, Senator Wagner in a signed article in the *New York Sun* said:

> The law does not require any employer to sign any agreement of any kind. Congress has no power to impose such a requirement. An agreement pre-supposes mutual consent. The law merely requires that an employer bargain collectively with his workers, which means that he shall receive their representatives and engage in a fair discussion, in the hope that terms may be voluntarily agreed upon by both sides without recourse of strife.
>
> The law does not under any circumstances require any employer to sign an agreement forcing any worker to join any union, whether it be a union representing the majority of his employees or not.

The United States Supreme Court did, by a vote of five to four, declare the Wagner Law constitutional but the majority in writing that opinion went so far as to say in same:

> The Act does not compel agreements between employers and employees. It does not compel any agreement whatever.

Four members of the Supreme Court held that the entire Wagner Act was unconstitutional and yet the five members who held the law to be constitutional said that *"It does not compel any agreement whatever."*

Chief Justice Hughes, who was one of the five judges who held the Wagner Act to be constitutional, said in his written opinion:

> The act does not interfere with the normal exercise of the right of the employer to select his employees or to discharge them.
>
> The law goes no further than to safeguard the right of employees to self-organization and to select representatives of their own choosing for collective bargaining or other mutual protection without restraint or coercion by their employer.

Labor unions have claimed and will, as a matter of policy, still claim that when an election shows that a majority of the employees favor their organization, the company must sign a contract but that statement is false because the United States Supreme Court has definitely stated *"It does not compel any agreement whatever."*

Knowing that they can depend upon the connivance of any National Labor Relations Board with which they come in contact, the union representatives insist and keep on insisting that the company must sign a contract, but it is purely a bluff and without legal weight.

The signing of a contract usually means the beginning of troubles and strikes and should be avoided.

The A. F. of L. Gets Another Licking

Falsely claiming that a majority of the employees at Beacon Mfg. Co., Swannanoa, N. C., were members of their union, the A. F. of L. induced the National Labor Relations Board to order an election . The election resulted as follows:

For the A. F. of L.	204
For the company	1,547

This followed closely upon an election at the Champion Paper & Fibre Co. at Canton, N. C., which showed:

For the A. F. of L.	119
For the company	2,104

These two elections show that the A. F. of L. is in very poor standing in western North Carolina but the standing of the C. I. O. seems to be even lower because in an election held at the Asheville (N. C.) Mica Co. plant the vote was:

For the C. I. O.	34
For the A. F. of L.	90
For the company	306

The C. I. O. leaders realized that they would lose an election at the Lane Co., Alta Vista, Va., and had the N. L. R. B. director cancel the election. But the mill held an unofficial election at the specified time. The result was:

For the C. I. O.	128
For the company	799

The C. I. O. did not have much better luck when it had an election called in another section of the South. The vote at Full Fashioned Hosiery Division of the Grenada Industries, Grenada, Miss., was:

For the C. I. O.	122
For the company	297

George Baldanzi, William Smith and the other C. I. O. organizers who came South with a broadside of publicity and the boast that they were going to spend $1,000,000 to organize Southern mills, have made a complete failure and are now thoroughly discredited.

These advocates of social equality with Negroes have done right well in organizing the Negro employees of tobacco plants but we know and they will eventually know that they will have a tough time getting the weekly dues out of Negroes.

THE CHRISTMAS JOHN L. LEWIS INTENDED

Reprint

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

CONVERSE, S. C.—The first step in a $1,500,000 reconversion and improvement program by D. E. Converse Co. has been completed with the installation of a giant cloth press capable of handling approximately 64 bales of material a day. Other plant improvements will include the installation of 1,000 new looms to replace present weaving equipment, overhauling the picker room, installing of fluorescent lighting and a humidifying system and erecting new card room machinery.

GASTONIA, N. C.—Sunspun Chenilles, Asheboro, N. C., an affiliate of Burlington Mills Corp., has executed a ten-year lease for 6,250 feet of floor space in one of the 21 buildings being constructed here by the Gastonia Industrial Realty Corp. Sunspun will occupy half of the 12,500 square foot building. Sunspun has operated a small-scale Gastonia branch plant for some time.

JACKSON, GA.—Pepperton Cotton Mills of Jackson is having a complete water system, including sewerage facilities, installed. When completed the improvements will represent an expenditure of $150,000.

CRAMERTON, N. C.—Burlington Mills Corp., Greensboro, N. C., which recently purchased Cramerton Mills, Inc., has offered to sell to the Cramerton employees the houses of the village. The houses have been offered on the basis of a small cash down payment and the balance on long terms. It is estimated that about 550 of the 600 houses will be sold, with 35 or 40 being reserved by Burlington.

GREENVILLE, S. C.—The Abney interests of Greenwood and Anderson, S. C., have purchased the entire stock of Woodward, Baldwin & Co. of New York, which carries with it the controlling stock of Brandon Corp. here. The amount involved in the transaction was not revealed. Brandon Corp. operates the Brandon Plant, Brandon Duck Mills and Poinsett Plant in Greenville, Renfrew Bleachery at Traveler's Rest, S. C., and a plant at Woodruff, S. C.

Members of the 25-Year Club of the Marshall Field & Co. manufacturing division held their fourth annual banquet at Spray, N. C., recently. Their service with the company ranges from 25 years to 61 years. Combined service for the group totals over 12,000 years. Membership in the club stands now at 358, of which 71 are members who became eligible this year. The group includes 49 employees retired under the company's retirement program. Harold W. Whitcomb of Spray, divisional vice-president and assistant general manager, presided, and James E. Gheen, New York public relations expert, was the principal speaker. J. Frank Wilson, production manager and a member of the club, spoke briefly, and Luther H. Hodges, New York, vice-president and general manager, presented membership pins to the new members. Hughston M. McBain, president of Marshall Field, and James L. Palmer, executive vice-president, both of Chicago, made brief remarks in praise of the loyalty and steadfastness of the group.

PENDLETON, S. C.—Blue Ridge Yarn Mills, Inc., acquired by LaFrance Industries, Inc., New York City, will be operated under the administration of Pendleton Mfg. Co., LaFrance, S. C., a subsidiary of LaFrance Industries, in the production of cotton yarn which is used by Pendleton in making LaFrance upholstery fabrics. Paolini Gerli of New York has been elected president of Blue Ridge Yarn Mills; J. W. McKinney of LaFrance, secretary; George Asnip of Greenville, S. C., vice-president, and D. J. R. Suffredini of Philadelphia, treasurer.

DOBSON, N. C.—Piedmont Silk Mill will move Jan. 1 from Greensboro, N. C., to Dobson, where a building 257 feet long and 89 feet wide will be occupied by the firm. Piedmont is expected to employ 100 persons in the first year of operations at Dobson. The Greensboro site which has been occupied by Piedmont has been sold to Jacques Schloss of Sedgefield, who will operate a bedspread plant under the name of Tuftwick Corp., employing about 200 persons.

STANLEY, N. C.—Fifteen houses for Stanley Mills, Inc., are under construction, the first of 50 houses to be built to accommodate employees who will work in the new plant addition.

CHATTANOOGA, TENN.—E. I. du Pont de Nemours & Co. is building a $3,016,000 nylon yarn plant on the north side of the Tennessee River, near Chickamauga Dam. Approximately 18 months will be required to build and activate the plant. The cost of the entire project, including the purchase and installation of equipment, has been estimated to be more than $20,000,000. The factory will be 748 feet by 324 feet and is to be almost entirely constructed of steel and concrete.

KINGS MOUNTAIN, N. C.—The assets of the Cora Plant of Textiles, Inc., an 18,808-spindle carded yarn mill which recently was acquired by Scranton (Pa.) Lace Co., have been organized under the name of Craftspun Yarns, Inc. The new company has an authorized capitalization of $1,200,000.

AMPTHILL, VA.—A 20 per cent curtailment in the production of rayon at the Spruance Works of E. I. du Pont de Nemours & Co. at Ampthill has been occasioned by the shortage of caustic soda. None of the plant's 5,000 workers will be suspended but a reduction in the number of hours which can be worked will be necessary. While a strike at the plant of the company's chief caustic soda supplier in Texas has ended, supplies have not been received in sufficient volume to permit full operations.

WEST POINT, GA.—An employees' Christmas bonus of $25 and an extra week's pay has been authorized by the board of directors of West Point Mfg. Co., Lanett (Ala.) Bleachery and Dye Works and Dixie Cotton Mills, LaGrange, Ga. The bonuses will total approximately $700,000 and will go to men and women in continuous employment between Aug. 31 and Dec. 15. The directors announced a net profit for the year of $5,461,229.99 from West Point Mfg. Co. and the subsidiaries, Wellington Sears Co., Dixie Cotton Mills, New England Bunting Co. and Equinox Mill. The stockholders voted to split the outstanding stock of West Point Mfg. Co. on the basis of four shares of $5 par value for each $20 par value outstanding stock. An extra dividend of three per cent on the par value of stock outstanding was authorized, payable Dec. 13 to stockholders of record Nov. 29.

GAFFNEY, S. C.—A dividend of $4 per share on the common stock has been voted by directors of Gaffney Mfg. Co. The directors ordered $1 per share paid at once and an additional $3 per share paid Jan. 10, 1947, to stockholders of record Jan. 4, 1947. No preferred stock is outstanding. The par value of the common stock is $50 per share and the dividend ordered will total $64,000.

ABBEVILLE, S. C.—Abbeville Mills Corp., which in the past has manufactured spun rayon fabrics and spinet yarns, has been converted to the manufacture of long staple blended yarn fabrics. Machinery and equipment for the new woolen blending process are being installed.

LANCASTER, S. C.—Springs Cotton Mills here has been granted the approval of the Civilian Production Administration to build a power plant to service the new bleachery now under construction. The estimated cost of the power plant is $248,706.

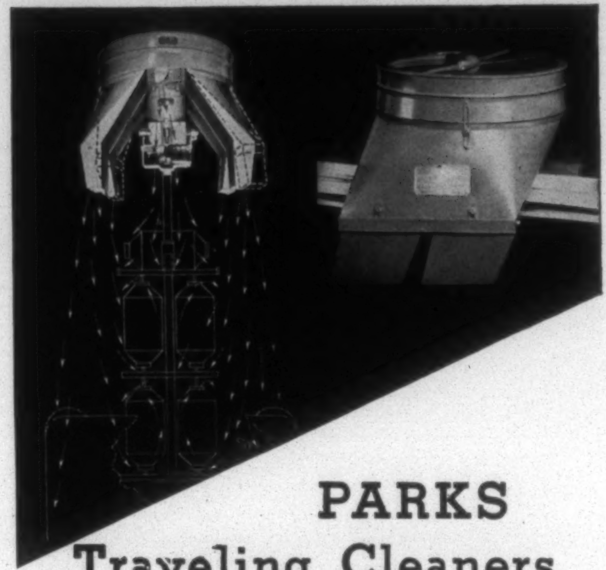
MONTICELLO, ARK.—Charm Tred Mills, Inc., rug manufacturer employing duck as backing for rugs, opened last month, with Edward Thomas, former colonel in the Army Air Corps, as plant manager in charge.

GREENSBORO, N. C.—Proximity Mfg. Co. of Greensboro, Tabardrey Mfg. Co., Haw River, N. C., and Cone Export Co., Raleigh, N. C., have consolidated into a new corporation with authorized capital stock of 1,500,000 shares at $1 per share. The associated interests will operate under the name of Proximity Mfg. Co.

KANNAPOLIS, N. C.—Cannon Mills Co. will establish a pilot plant to test the use of synthetic fibers at a site yet to be announced. The pilot plant will serve as a "model mill" designed to give accurate data on the design, production and practicability of new yarns and fabrics. Cannon Mills will pay a year-end dividend of $1 per share in January and February.

GREENVILLE, S. C.—Virginia Mfg. Co. at Fork Shoals, near here, sustained water damage in the card room, fire and water damage in the picker room and smoke damage throughout the plant, when fire broke out in the yarn manufacturing plant recently. A small amount of cotton was burned. Operations at the mill were suspended for several days.

Average weekly earnings for August in the textile mill products and other fiber manufactures grouping were $33.99, an increase of 6.5 per cent from July and of 24.8 per cent from August, 1945, the Bureau of Labor Statistics reports. Average weekly hours in this classification were 40.1, an increase of 1.1 per cent over July, and 4.3 per cent over August, 1945. Average hourly earnings were 92.3 cents, an increase of 5.4 per cent over July and 19.7 per cent over August, 1945.



PARKS
Traveling Cleaners
have such fixed habits

Every so often they give spinning frames (spoolers, warpers, winders, too) a mild fanning. Lint is shooed away before it has a chance to bunch.

Improves Quality	Improves Quantity
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Smoother Yarn	Fewer Stops
Fewer Piecings	Fewer Pickouts
Fewer Seconds	Fewer Cutouts

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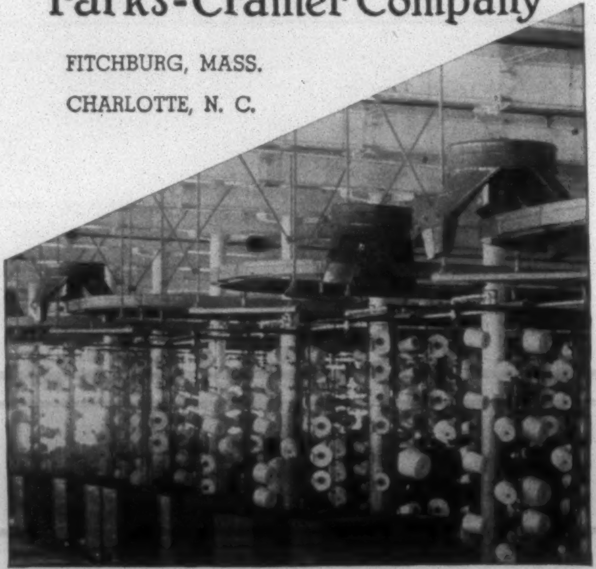

Promotions, Resignations, Elections, Transfers, Appointments, Honors, Notes on Men in Uniform, Civic and Associational Activity

PERSONAL NEWS

At the regular monthly meeting of the board of directors of E. I. du Pont de Nemours & Co. Dec. 16 Irenee du Pont, a former president, and H. G. Haskell, former vice-president, announced their resignation from the finance committee of the organization. J. Thompson Brown resigned from the company's executive committee and from his position as a vice-president. All three remain on the board of directors. At the same time it was announced that the two vacancies on the finance committee would be filled by Mr. Brown and Elwyn Evans, president of the Wilmington (Del.) Trust Co. and a Du Pont director. Mr. Brown's place on the executive committee went to Charles A. Cary, assistant general manager of the company's rayon department. Mr. Cary was also made a vice-president and was elected to membership on the board of directors.

Dr. Edward Abrams, a native of Bridgeport, Conn., and Fleischmanns, N. Y., has joined the staff of the Institute of Textile Technology, Charlottesville, Va., and will work in microbiology and biochemistry. He was formerly with the National Bureau of Standards as head of the microbiological laboratory.

E. D. Newton, formerly superintendent of Highland Park Mfg. Co. at Rock Hill, S. C., has been appointed manager of Gastonia (N. C.) Weaving Co.

George H. Fowler, secretary-treasurer of Copland Fabrics, Inc., at Burlington, N. C., has been elected to the board of directors of the Burlington Chamber of Commerce.

James J. Colvin of Atlanta has been appointed mechanical research engineer at Callaway Institute, Inc., LaGrange, Ga. He was formerly librarian at Georgia Tech.

Charles W. Coker, vice-president of Sonoco Products Co., Hartsville, S. C., recently was elected president of the South Carolina Tuberculosis Association.

William H. Ruffin, vice-president and treasurer of Erwin Cotton Mills Co. of Durham, N. C., has been elected a new director of the North Carolina Citizens Association.

J. R. Davison recently was appointed general manager of Royston (Ga.) Mills, Inc., and Nathan Dearman was made superintendent.

Irving I. Serwer of the Cotton Piece Goods Salesmen's Association last month was elected fourth vice-president of the National Council of Salesmen's Organizations. Samuel Goldberg of the Philadelphia Textile Salesmen's Association was named secretary of the organization.

E. Trammell Combs, general superintendent and assistant manager of California Cotton Mills at Oakland, Cal., has resigned after serving about ten years with the concern. He is now operating a sales company on the West Coast.

P. W. Beggs, superintendent of Goodyear Tire & Rubber Co.'s textile mill in Sao Paulo, Brazil, has returned to the United States on home leave after six years overseas.

William J. Erwin has been named chief executive officer in charge of Republic Cotton Mills Division of J. P. Stevens & Co., Inc., at Great Falls, S. C., succeeding George M. Wright, retired. Mr. Erwin was associated with Republic Cotton Mills as vice-president for a number of years prior to its joining the recently consolidated J. P. Stevens & Co., Inc. Since that time he had acted as assistant executive officer.

Eugene A. Messner, director of the Office of Price Administration consumer goods division since July, resigned Dec. 13. Mr. Messner was in the textile converting business for a number of years under the firm names of Klein-Messner, Inc., Rossman Bros. & Messner, Inc., and Eugene Messner, Inc.

Thurmond Chatham, chairman of the board of Chatham Mfg. Co. at Elkin, N. C., and a former Navy commander, recently was awarded the medal of the order of Orange-Nassau and received a letter from Queen Wilhelmina of the Netherlands in recognition of his service in behalf of the Dutch in World War II. Mr. Chatham, while associated with the Bureau of Ordnance in Washington, D. C., assisted in outfitting and arming Dutch warships and merchant ships in the first year of the war.

Ralph H. Balch, formerly engaged in research development work at the Cumberland, Md., unit of Celanese Corp. of America, recently was named assistant manager of Staunton Textile Corp., a subsidiary at Staunton, Va. Clyde C. Hurst, formerly connected with Burlington Mills Corp. Greensboro, N. C., has been appointed overseer of weaving at the Staunton unit of Celanese Corp.

Robert F. Jessen, textile technologist at Callaway Institute, Inc., LaGrange, Ga., has left that organization to accept a position with Springs Cotton Mills at Lancaster, S. C. Mr. Jessen will be succeeded at Callaway by Bradley H. Nickles, who has been associated with the institute for about a year.

William T. Royster, superintendent of Morehead Cotton Mills Co. at Spray, N. C., is reported as being out of danger after being seriously injured in an automobile crash Dec. 2.

K. H. Boydell, group superintendent for Burlington Mills Corp. plants at Central Falls, Newton, Fayetteville, Franklinton and Statesville, N. C., is now group superintendent of the Burlington, N. C., area filament plants. W. I. Spencer of High Point, N. C., will take over Mr. Boydell's former duties at Central Falls and will have 12 other Burlington Mills plants in North Carolina under his supervision.

Jesse T. Crawford, formerly superintendent of the Whitmire, S. C., plant of Aragon-Baldwin Cotton Mills, has been appointed general manager of the three plants of Republic Cotton Mills at Great Falls, S. C. Henry W. Suber, a veteran of World War II and a Clemson College graduate, will succeed Mr. Crawford at Whitmire.

Fritz Zweifel, for the past ten years district manager of the Charlotte office of H. & B. American Machine Co., has been appointed general sales manager of the organization and will make his headquarters in Pawtucket, R. I.

W. O. Reed recently was appointed overseer of carding at Fitzgerald (Ga.) Mills Corp.

W. F. Davis, formerly superintendent of the Ottaray Plant of Monarch Mills, Union, S. C., is now secretary-treasurer of Palmetto Spinning Corp., a worsted mill at Laurens, S. C. Walter Danhoff, formerly assistant superintendent of Gaffney (S. C.) Mfg. Co., succeeds Mr. Davis as Ottaray superintendent.

Warwick Chemical Co., a division of Sun Chemical Corp., has announced the following personnel changes: Justus Hoyt has been named manager of the newly-created coated finishes department, Ira Hurd has been appointed assistant sales manager in charge of textile sales and technical development, and in New England Willard Brothers has been added to the Warwick sales staff.

Alfred E. Stacey, Jr., air conditioning pioneer and one of the seven founders of Carrier Corp., has rejoined that organization as process consultant to the sales division. Mr. Stacey has been on active duty in the Navy and held the rank of captain.

Houghton Wool Tops

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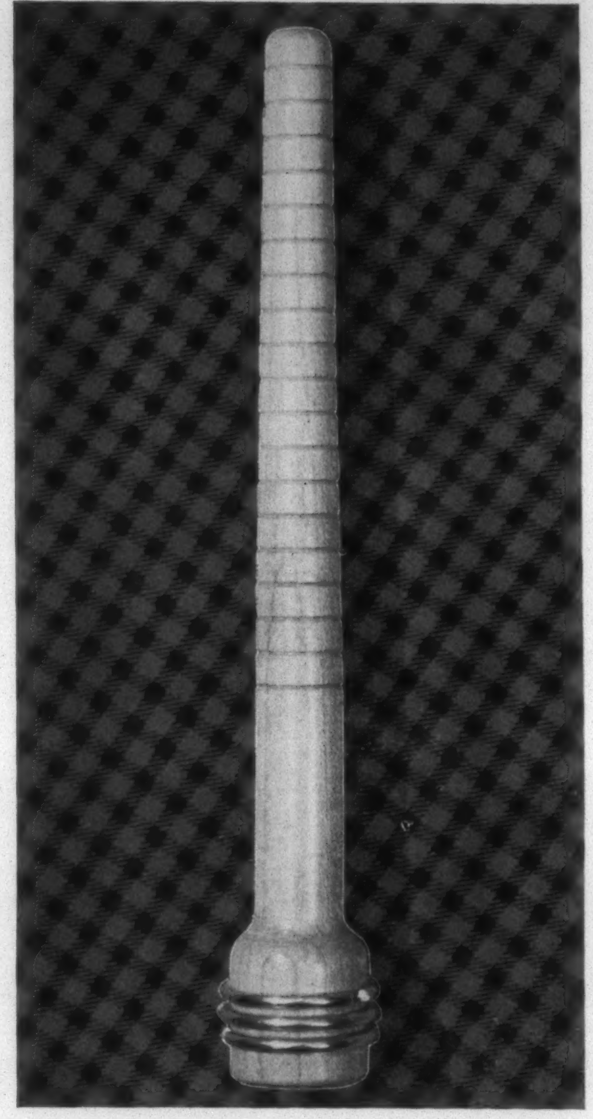

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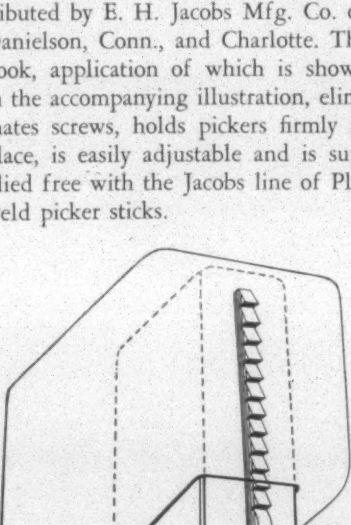
For the Textile Industry's Use

EQUIPMENT — SUPPLIES — LITERATURE

Jacobs Develops Adjustable Hook For Loop Pickers

The Jacobs adjustable serrated hook is described in a folder now being distributed by E. H. Jacobs Mfg. Co. of Danielson, Conn., and Charlotte. The hook, application of which is shown in the accompanying illustration, eliminates screws, holds pickers firmly in place, is easily adjustable and is supplied free with the Jacobs line of Plyweld picker sticks.



For leather loop pickers, the company recommends using No. 10-24 Parker Kalon self-tapping screws, flat head, one-half or five-eighth inches long; squeeze leather picker on stick to final adjusted position, then with No. 17 drill put hole through back of picker into picker stick for self-tapping screws. On subsequent pickers, same hole should be used by punching hole in leather sticks opposite already-drilled hole after adjustment of loop picker.

Rohm & Haas Acquires Plant Site In Texas

Rohm & Haas Co. of Philadelphia, Pa., announces the acquisition of about 500 acres of land on the Houston Ship Channel, Deer Park, Tex., for use as a plant site. The company is planning to manufacture chemical products at its new location. Construction of the plant is expected to get underway early in 1947. Rohm & Haas operates plants at Bristol and Philadelphia, Pa., and at Knoxville, Tenn., where it manufactures chemicals principally for the leather, textile, insecticide and plastics industries. The company also manufactures various chemical specialties for other industries.

New Trade-Marks Law Analyzed By Institute

Trade-mark registration will become a "practical necessity" when the Lanham Act becomes law next July, according to the Research Institute of America, which has just issued a 56-page analysis, *Preparing for the New Trade-Mark Law*. "While the Lanham Act will offer trade-mark owners unprecedented protection against encroachment," the institute points out, "trade-marks registered under earlier laws will not automatically receive all the benefits of the act. For example, trade-mark owners whose marks are registered under the Acts of 1905 or 1881 must have their marks republished on the principal register if they want the benefit of the incontestability provisions of the new law."

Since a mark will not become incontestable until five years after it is published, trade mark owners are urged to republish immediately after the Lanham Act goes into effect July 1, 1947, even though previous registration may not expire for a number of years. The institute also recommends that marks denied registration under the present law be re-examined to determine whether they will qualify under the new law.

"Many trade marks which could not be registered under the Act of 1905 will qualify for registration under the Lanham Act," the report asserts, "since the new law wipes out the distinction between the "right to use" and the "right to register." In view of this fact, re-examine before next July all marks previously denied registration because they were geographic in connotation; were identical with a family or corporation name; had more than one bona fide owner; were service, association or certification marks; were not being used by the owner; were not affixed to goods, or were being used on a different type of goods." Other recommendations in the institute's report, *Preparing for the New Trade-Mark Law,* cover ownership and use of trademarks; qualifying a trade-mark for registration; trade-marks in foreign trade, and steps to be taken before the law goes into effect in July.

The report was drawn up for institute members by Walter J. Derenberg, attorney and authority on trade-mark law, in collaboration with the institute's board of editors. It is one of a series on current business problems prepared under the supervision of Leo M. Cherne, editor-in-chief. Others in the series include *Facing a Union Drive, Year-End Tax Planning, How to Reduce Payroll Taxes Under Merit Rating,* and the widely discussed *Communists in Labor Relations Today.* The Research Institute is a private organization specializing in business and economic controls with headquarters in New York and Washington, and offices in over 70 cities.

Fire-Fighting Weapon Extinguishes Blaze Quickly

A new development in fire-fighting efficiency is the Underwriters-approved, stored-pressure hand extinguisher manufactured by Union Stop-Fire Corp., Brooklyn, N. Y. As easy to use as a garden hose, the Stop-Fire is said to be as big an improvement over the hand pump extinguisher as it is over the awkward water bucket. While ease of operation and accuracy of aim are significant improvements, the character of the fluid in the Stop-Fire extinguisher is similarly an important advancement. Carbon dioxide is combined with carbon tetrachloride to produce a chemical of extraordinary effectiveness in putting out fires. Shot as a fine spray from the Stop-Fire, this doubly effective chemical is converted instantaneously into a heavy, fire-smothering gas. Even fires of the most stubborn kind—oil, ether, gasoline, electrical — are blanketed and snuffed out in a matter of seconds. The extinguisher has a longe range, the bulk of the stream traveling anywhere from 15 to 25 feet.

The fluid is effective indefinitely, and the Stop-Fire tank does not have to be refilled, except when used. A pressure gauge attached to the extinguisher indicates fluid pressure at all times. Stop-Fire stored-pressure extinguishers are manufactured of 85-15 brass, are non-corrosive, and there is no possibility of zinc oxidation. Absence of moving parts make the Stop-Fire instantly usable whenever needed, since there is nothing to get out of order at any time.

Brown Publishes Booklet On Control Instruments

Brown Instrument Co. of Philadelphia, a division of Minneapolis-Honeywell Regulator Co., has recently issued a new catalog for the purpose of acquainting manufacturers and suppliers with the many applications to the textile industry of measuring and controlling instruments. *Control Instruments for Textile Processes* contains descriptions, with general specifications, illustrations and clear diagrams, of such instruments and their uses in textile industries as the following: Moist-o-Graph slasher system for cotton or rayon, size level and temperature controls, cylinder temperature control, moisture content control, continuous bleach control, dyeing and drying controls, kier boiling control, pH control and size cooking and storage control.

Also included in this 30-page booklet are photographs and specifications of other instruments applicable to the textile industry, such as portable recording thermometer-hygrometer, indicating and recording control pressure gauges, recording liquid level air-operated control and electric recording and integrating flow meter. Other useful information can be found in the recommended range chart and the general dimensions of various instruments. Copies of Catalog No. 9305 may be secured by addressing Brown Instrument Co., Wayne and Roberts Avenues, Philadelphia 44, Pa.

Business Forms Portfolio Available From Uarco, Inc.

To make it possible for firms in the textile industry to examine cost-reducing systems used by comparable business organizations for consolidating and simplifying writing operations, Uarco, Inc., of Chicago, manufacturer of continuous business forms, is making available a series of new sample portfolios. Containing an extensive array of business forms utilized throughout this industry, the portfolios will suggest innumerable time-reducing and cost-cutting methods of streamlining records and procedures. A portfolio may be obtained without any obligation by addressing Systems Department, Uarco, Inc., 5000 South California Avenue, Chicago 32, Ill.

DC 2103 Is Explained By Dow Corning Corp.

Dow Corning Corp., Midland, Mich., recently announced further details on DC 2103, a thermosetting resin developed and produced for use as a heat-stable bonding material for inorganic fabrics in the production of rigid electrical laminates, and for bonding finely divided particles such as powdered metals or mica, silica or carbon. DC 2103 is unique among thermosetting resins

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for its high heat stability, low water absorption, excellent dielectric properties over a wide frequency range and for its resistance to carbon tracking. Like all Dow Corning silicone products, DC 2103 is an organo-silicon polymer material built on an inorganic skeleton of alternate silicon and oxygen atoms. Its unique properties are due largely to the inherent stability of this inorganic skeleton.

DC 2103, as furnished, is a 60 per cent solution of silicone resin in toluene. Without the addition of a catalyst, this solution air dries in about an hour at 77° F. and 50 per cent relative humidity depositing the resin in a hard and tack-free form which has an initial melting point of about 70° C. (158° F.) Transition to a liquid state is quite sharply defined and the melted resin is very fluid. As the temperature is gradually increased at a rate of about 3° C. per minute, the resin begins to gel. A condensation reaction sets in at about 150° C. as indicated by bubbling of the resin. Bubbling decreases markedly at about 185° C. and the resin begins to thicken at about 240° C. As the temperature is increased over a period of about half hour to 250° C. (482° F.) the resin becomes a soft, non-flowing solid. After further heating at 250° C. or higher, the resin sets to form a hard, infusible solid.

Jap Textile Mission Report Is Available

The textile mission to Japan sponsored by the Department of State and the United States Army, returned in April of this year, after leaving with General MacArthur a report of the condition of the textile industry in that country. That report was forwarded to Washington and, while it was released to the press through a limited number of mimeographed copies, it has now been printed and is available for 15 cents at the office of the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Booklet Covers Rayon's History and Development

A new booklet, *Short Story of Rayon*, has been prepared by American Viscose Corp. and is currently being distributed. It is designed to give the most outstanding facts about the history and development of rayon and its present-day uses, and to answer the questions that are most commonly asked about rayon. Different sections of the booklet are devoted to the discovery of the viscose and acetate processes for making rayon, the development of dull rayon, rayon crepes, high strength rayon tire cord, and the part that rayon played in World War II. The booklet concludes with a brief description of the role of research in developing and improving rayon yarns and staples, as well as rayon fabrics, and in increasing the usefulness and versatility of rayon. Copies of the booklet may be obtained from American Viscose Corp., Public Relations Department, 350 Fifth Avenue, New York 1, N. Y.

Bulletin Describes Fans For Fume Exhaustion

A new 12-page bulletin on Durco corrosion-resistant fans for exhausting acid and other corrosive fumes has just been published by The Duriron Co., Inc., Dayton, Ohio, and is available on request. This bulletin gives complete

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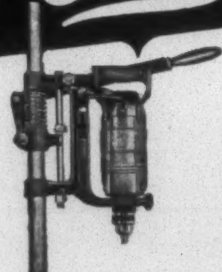


Mounted in a No. 8 Thor Drill Stand (illustrated above), a Thor Portable Drill does double duty as a workshop "drill press." Unmounted, it can be carried to the drilling jobs you can't bring to it. Sturdy, powerful Thor Drills are the result of more than 50 years of portable electric tool manufacture. Thor Drills assure top production.

DOUBLE DUTY
Portable Electric Tools

UNION
SUPPLY and Electric Company
606 S. MINT ST. CHARLOTTE, N. C.

engineering data including dimensions and capacities of the five standard sizes of fans made by the company. A description of Duriron, Durichlor and Durimet, the special Durco corrosion-resisting alloys of which the fans can be built, is included. The booklet points out that the alloy used in constructing each unit depends upon the type of corrosive service it will encounter.

Some of the typical applications for the fans are shown by drawings in the bulletin. The booklet also includes information on the type of drives used, as well as Durco hood outlets, bell end adapters and Durco drip traps. In addition, complete instructions are given on how to specify, how to select and how to order the correct Durco fan for a particular application. A free copy of this bulletin can be obtained by writing to The Duriron Co., Inc., Dayton 1, Ohio, and requesting Bulletin 1102.

Allis-Chalmers Offers Pedrifugal Pump Line

Allis-Chalmers Mfg. Co., Milwaukee, Wis., announces a new line of Pedrifugal pumps, developed at its Norwood Works, to meet the needs of wide range of uses which require a sturdy, reliable pump of moderate capacity selling at a competitive price. This new line of cast iron bronze-fitted, pedestal-type centrifugal pumps comes in three principal sizes—one inch by one inch, two inches by two inches, and three inches by three inches. Capacities are from ten to 500 gallons per minute at heads from ten to 100 feet, with power requirements from one-quarter to 15 horsepower. The units are splatter-finished with gray enamel. Pedrifugal pumps are expressly designed for use with Texrope V-belt drives, giving an infinite range of capacities regulated by size of sheaves and power supplied. All pumps are fitted with impellers of maximum diameter, and variations in capacity are provided by changes in speed through sheaves of larger or smaller diameter.

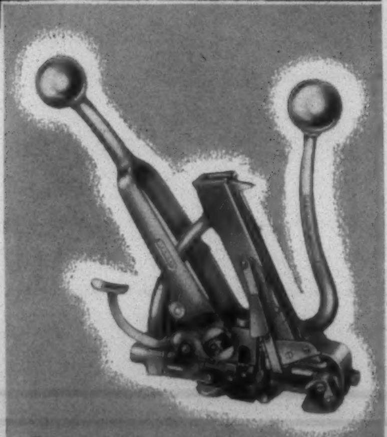
Small and compactly designed, all sizes of the Pedrifugal pumps have essentially the same dimensions. Construction features embody the following: only one fit, between the pedestal and the casing; an open impeller keyed to the shaft and fitted with an impeller lock nut, which will handle liquids containing a considerable volume of solid material; a precision made, mechanical seal, instead of the conventional packing rings, seal cage and valve; two bearings of ample size for either direct or belt drive; and, except for impeller and casing, the same pedestal casting, shaft, ball bearings, seal and impeller nuts for all capacities. These Pedrifugal pumps reflect Allis-Chalmers' growing emphasis on products for over-the-counter sales. Normally, Pedrifugal units will be stocked and sold without motors and the purchaser may use any suitable available power. However, the pump, steel base, Allis-Chalmers motor and Texrope equipment can be supplied as a unit, or any of these items can be purchased separately.

A new 12-page instruction booklet, entitled *Allis-Chalmers Water Conditioning Chemicals and Equipment,* has been announced by Allis-Chalmers. The booklet touches upon the importance of feedwater control, the care of testing equipment, obtaining samples, test procedures, and carries handy reference tables to assist in reporting results. A range of services available is also included. Many years of experience in water conditioning work has qualified the company as a reliable source of assistance in this field, the booklet points out. Copies of it, 28X6385, can be obtained from Allis-Chalmers Mfg. Co., Milwaukee 1, Wis.

With this light, easy-to-use, improved Stanley "Ace" Strapping Tool!

Even beginners can do a fast, expert strapping job with the improved Stanley "Ace" Strapping Tool. Positive spring feed holds a 100-seal clip in magazine in any position. One lever tensions strapping, other cuts strapping, feeds and crimps seal all in one quick motion – all in only 5 seconds.

The 10 lb. 3 oz. improved "Ace" is available in 3 sizes for 3/8", 1/2" and 5/8" strapping to handle 'most any job – with special accessories designed for special needs. Get full details on the Stanley "Ace" Strapping Tool. Write the Stanley Works, Steel Strapping Division, 201 Lake Street, New Britain, Connecticut.



Improved Stanley "Ace" Strapping Tool With Automatic Seal Feed

STANLEY

STEEL STRAPPING AND CAR BANDING SYSTEMS

Carr Heads Rayon Yarn Producers Group

At a meeting in New York City held Dec. 3, C. M. Carr, vice-president in charge of sales for American Enka Corp., was elected chairman of the Rayon Yarn Producers Group and Matthew H. O'Brien, attorney for many years identified with the rayon industry and at one time a vice-president of Celanese Corp. of America, was named secretary and treasurer. Mr. Carr succeeds S. R. Fuller, Jr., president of American Bemberg Corp. and North American Rayon Corp.; who resigned as chairman of the group. Mr. O'Brien succeeds Hubert Kernan, deceased, as secretary, and Ashton M. Tenney of A. M. Tenney Associates, who resigned, as treasurer.

Mr. Carr has been vice-president of American Enka Corp. since 1929 and formerly was president of Durham (N. C.) Hosiery Mills. Mr. O'Brien first attracted the attention of the rayon trade in 1929 when he appeared before the House Ways and Means Committee during hearings on the Hawley-Smoot Tariff Act, on behalf of his client, Celanese.

Studley Heads A. S. M. E. Textile Section

Arthur B. Studley of SKF Industries, Inc., was elected chairman of the textile division of the American Society of Mechanical Engineers, when the division members convened Dec. 6 in New York City in conjunction with the annual A. S. M. E. meeting. Mr. Studley succeeded Carl D. Brown of Draper Corp., who was presented a certificate of appreciation for his services and who will remain as inter-society representative. Other officers elected were W. Arthur Smith, Jr., Torrington Co., vice-chairman; Richard O. Palmer, Machine Design Associates, secretary; and L. T. Parkham, Westinghouse Electric Corp., recorder.

Division members visited the plant of Robert Reiner, Inc., Weehawken, N. J., as guests of Dr. Robert Reiner. Luncheon followed the plant tour. Charles E. Crede, chief engineer of L. N. Barry Co., read a paper entitled "Dampening of Mill Movement by Frahm System." John O. Amstuz, chief engineer of Behr-Manning Corp., discussed "Electrocoating Textile Fabrics."

Continued Price Change Reporting Unnecessary

It is no longer necessary to report price changes for commodities and services that have been decontrolled, the Office of Price Administration reminded all lines of trade recently. The former reporting requirement was revoked, effective Nov. 19, O. P. A. pointed out. Because of lack of information or misunderstanding, however, many businessmen have continued to report to O. P. A. all price changes on various commodities or services upon which they had previously been required to file such reports. It is to these people and firms that the announcement was directed, O. P. A. said.

Specifically, the revocation order provided that all requirements in any O. P. A. regulation or order that a seller or buyer report to O. P. A. the price he is charging or paying for a commodity or service which has been exempted from price control were thereby revoked. An important rule that still remains in effect, however, is that all producers, processors and distributors and other sellers of any commodity under price controls are required to keep on hand for a year after date of decontrol of the commodity, all records, reports and other documents that they were required to maintain to the time of decontrol.

Raw Silk Market In Confused State

Establishment of the world's exclusive silk market in New York City as the goal of the U. S. Commercial Co. has been divined by dealers in the raw fiber, who say that a bright future for silk is seen in their "crystal," which gives the lie to reports of consumer apathy toward the "queen of fibers." Dealers say that their predictions will begin to crystallize as soon as raw silk sales again become the function of private business. They have placed the blame for U. S. C. C.'s failure to unload thousands of bales of raw silk at recent auctions on the government's price policies, which have offered the buyer no assurance that downward pricing would be restrained long enough for him to successfully dispose of the bales being acquired at each sale.

Although the rubber industry produced a record peacetime volume of goods in 1946 and is expected to repeat this performance, or better it, in 1947, the pent-up demand for rubber products is such that shortages will continue for many months, according to a recent year-end statement by Herbert E. Smith, president of United States Rubber Co. Mr. Smith predicted that the demand for coated fabrics would continue to exceed supply for many months and that lastex yarn will be short in the first part of the year, but more plentiful in the latter half. He also expressed the opinion that industrial products such as belting and hose, for which demand still far exceeds supply, probably would be short all year.

PENETRANTS • DETERGENTS • SOFTENERS • REPELLENTS • FINISHES

BURK-SCHIER

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Rubber Spokesman Sees Hope for Cotton

While cotton is rapidly losing ground to rayon in the tire cord field, it promises to become increasingly useful in three new textile products developed in the research laboratories of United States Rubber Co., according to this firm. First to be developed was Ustex, a chemically-treated cotton yarn possessing 70 per cent more strength than regular yarn. This product was perfected during the war to make stronger parachute harness for Army and Navy airmen. It is now being used in high-pressure hose, belting and other products where high tensile strength is required.

Another new product is Strex, an elastic fabric without rubber. This fabric is intended for use in slipcovers, sweaters, surgical bandages and other products. The elasticity is achieved by twisting yarn cotton into the shape of a coil spring. It has a lower degree of tension than Lastex and similar materials deriving their elasticity from rubber. The third product is a fabric for dish towels possessing high absorbency and polishing characteristics. It is named Carosel and in appearance resembles linen. It is being produced only in limited quantities because of the lack of equipment and manpower. The textile content is 80 per cent cotton and 20 per cent asbestos. For centuries asbestos has been known for its fireproof qualities but this is believed to be the first attempt to take advantage of its absorbency and polishing characteristics.

Cotton will soon be doomed as a tire cord fabric unless the price is drastically reduced to meet competition from rayon, according to H. Gordon Smith, vice-president and general manager of the rubber company's textile division. "The only reason any cotton is now being used in tires is that there is not enough rayon," Mr. Smith said. He pointed out further that it takes more cotton than rayon to build a tire and therefore the pound cost of cotton cord would have to drop much below that of rayon cord before it could compete with the synthetic fiber on a price basis.

Although the future of cotton tire cord looks dark, there is also a bright side to the South's leading industry. Tires represent about two-thirds of the rubber industry's total production. The other third consists of rubber footwear, raincoats, belting, friction tape, hose and hundreds of other products for industry, home, farm, and personal wear. Most of these contain a high percentage of cotton and there is no disposition to switch to another textile. Moreover, all tires are built with cotton chafer fabric, the material which takes up friction between tire and rim. It is estimated that the tire industry uses more than 50 million pounds of cotton a year for this purpose. Textile engineers in the company's research laboratories have found cotton to be the most versatile of textiles, possessing many properties lacking in the synthetic fibers.

Last year United States Rubber Co. purchased more than 27 million dollars worth of cotton and it is expected that 1946 purchases will equal that figure. "The usefulness of cotton should not be underestimated," Mr. Smith said. "It is the world's most important textile and will continue to serve man in the 20th century as it has through the ages. The rubber industry in the future will need great quantities of cotton even if its use in tire fabric is entirely discontinued. Through research the quality will be improved and more new uses developed."

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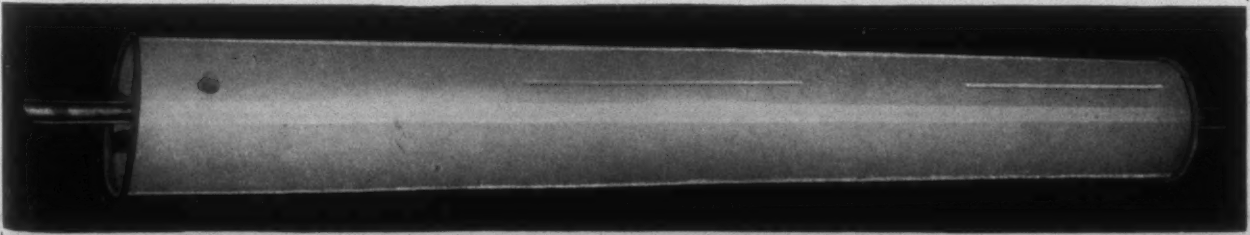

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OBITUARY

Wilfred Lawson Robertshaw, 65, for the past 23 years an executive of Southern Worsted Mills, Inc., Greenville, S. C., died suddenly Dec. 9 at his home in Tryon, N. C. Survivors include his wife, a son, two brothers and a sister.

Ralph L. Wilson, 76, of Rome, Ga., retired textile official and banker, died recently of a heart attack. Mr. Wilson, who had lived in Rome since 1900, was at one time associated with Massachusetts Cotton Mill which later became Pepperell Mfg. Co., Floyd Cotton Mills and Towers & Sullivan Mfg. Co. Surviving are his wife and a son.

P. P. Murphy, 68, president of the United Spinners Corp. in Lowell, N. C., died Dec. 11. Surviving are his wife, a daughter, a son, two brothers and one sister.

Alfred S. Paine, 68, retired textile executive, died Nov. 26 in Spartanburg, S. C. From 1919 to his retirement in 1937 Mr. Paine was general manager of Kendall Mills, with plants at Camden, Edgefield and Newberry, S. C., and Charlotte. Surviving are his wife, a daughter, and a sister and brother.

George F. Edson, 63, formerly connected with Peerless Woolen Mills at Chattanooga, Tenn., and who had recently joined the Northfield (Vt.) Woolen Mills, died Dec. 14. Surviving are his wife, two sons, two daughters and four stepchildren.

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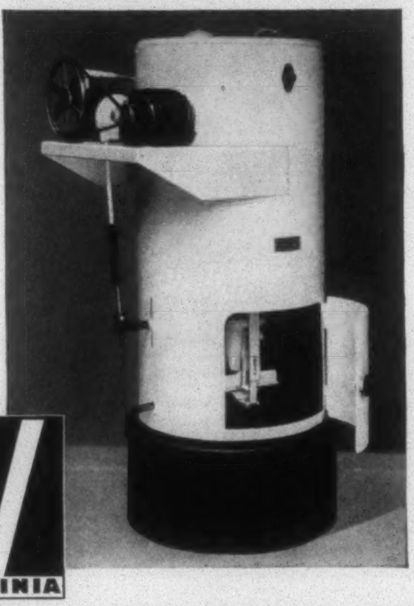

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Specialty Knitting Industry Growing in South

"In recent months there has been a very decided trend toward the establishment of new circular and flat knitting plants in the Southern states," according to a recent statement to this magazine by Morris Speizman, president of Morris Speizman Co., Inc., at Charlotte, N. C. "This trend has been accelerated by the development and delivery of high-speed multi-feed machines such as produced by Supreme Knitting Machine Co. and other shops. The surprising feature of this development has been the readiness with which old-line cotton and weavers have seen the possibilities inherent in these new high-speed units.

"It is quite a contrast to the normal conception of 'slow-moving Southerners' to find that over 80 per cent of all new high-speed knitting equipment has been delivered south of the Mason-Dixon Line. The end-uses to which output from these units is being put varies, ranging all the way from infant garments and polo shirts to upholstery fabrics. Indeed, the slip cover business promises to become an outstanding part of the industry, and its development probably will be as exceptional as that of the chenille bedspread industry a few years back.

"Interesting to note is the establishment of both small and large-scale integrated or vertical set-ups here in the South. For instance, Francis Fabrics, Inc., has achieved a complete integration in that the firm buys its cotton yarn, then knits, cuts, sews and ships its polo shirts direct from the plant at Connelly Springs, N. C., to all parts of the world. This is a modest establishment at present, but bids fair to expand rapidly in the months to come. On the other hand, there is the old-line firm of Russell Mfg. Co. at Alexander City, Ala. For over 40 years this has been a vertical set-up, receiving raw cotton at one end of the mill and shipping out finished garments from the cutting and sewing department."

Since being appointed agent for Supreme Knitting Machine Co. the Morris Speizman Co. has sold more than 150 of these multi-feed high-speed units to various Southern manufacturers. Among these are Barbet Mills at Lexington, N. C., Buck-Knit Processing Co. at Cherryville, N. C., Bantam Hosiery Mills, Conley Knitting Co., R. L. James & Son and Marion Hosiery Mills at Marion, N. C., Dilworth Hosiery Mills, Elbert Mills, Gracely Knitting Mills, Lewith Mills, Stowe Mfg. Co. and Velonit Corp. at Charlotte, Eureka Knitwear Mills and G. & H. Hosiery Co. at Hickory, N. C., Jewel Fabrics, W. T. Love and Piedmont Fabrics at Gastonia, N. C., Hodge & Gardner and Southern Yarn & Processing Co. at Belmont, N. C., Georgia Knitting Mills and James Thomas & Co. at Atlanta, Ga., Bud Fabrics at York, S. C., Burlington Mills Corp. at Greensboro, N. C., Cabin Handicrafters at Clayton, Ga., Cheraw (S. C.) Knit Fabrics, M. P. Cooke at Rich Square, N. C., Dolly Hosiery Mills at Valdese, N. C., Duff Looms, Inc., at Morganton, N. C., F. L. Elliott & Co. at Hildebran, N. C., Falls Mfg. Co. at Granite Falls, N. C., Fonville Knitting Co. at Burlington, N. C., Hillcrest Knitting Co. at Taylorsville, N. C., Maryon Fabric Mill at Carrollton, Ga., Morgan Mills at Laurel Hill, N. C., North State Knitting Mills at Newton, N. C., Oakboro (N. C.) Knitting Mills, H. K. Roberts & Son at Salisbury, N. C., and Steel Mfg. Co. at Cordova, N. C.

"Besides circular knitting development in the South, some manufacturers are looking with interest on the new high-speed warp knitting machine built by such firms as

Robert Reiner, F. N. F. and Robaczynski," states Mr. Speizman. "These present interesting opportunities for the future, and some quarters feel that they eventually will take up some of the slack in the broad weaving field both in underwear and dress goods fabrics. In recent months several small sweater and underwear plants have been started, among them Southern Knitwear Mills in Charlotte. This concern started very modestly with one hand knitting machine, and now is equipped with six new Robaczynski high-speed links and links flat knitting units. The firm manufactures baby garments made of the finest quality wool yarns and sells direct to retail outlets."

Durene Association Names 1947 Officers

Election of the following officers for the coming fiscal year has been announced by the Durene Association of America: J. B. Frierson, Jr., of Dixie Mercerizing Co., president; Harry Horrocks of American Thread Co., Hampton Yarn Division, vice-president; J. P. Holt of Aberfoyle Mfg. Co., treasurer; and A. C. Layton Newsom, executive secretary. At the annual meeting of the association held in November, plans were approved to expand promotional activities in line with current activities and growing interest on the part of manufacturers and retailers in merchandise of Durene yarn.

Indicative of manufacturer interest in providing retailers with informative labeling on merchandise made of Durene yarn, a sharp increase in the number of license agreements requested by manufacturers of men's, women's and children's hosiery, underwear and outerwear, and upholstery fabrics was recorded during recent weeks. Use of Durene garment stickers has reached an all-time high, and retail advertising featuring the advantages of Durene yarn increased more than 400 per cent in the months of September and October over the same two months last year.

The quality control plan of the Durene Association will be stepped up to keep pace with the increasing number of styles made of Durene yarn scheduled by licenses for 1947. Retail store buyers report that the quality control plan has definite value to them from the standpoint of quality assurance in a market where identified quality merchandise is of growing significance. The sales training manual, *Quality Wins Friends,* has proven very popular with training directors and buyers of stores throughout the country. Additional sales training material will be made available shortly. Wide demand for Durene educational literature by university schools of retailing is also noted.

Rayon Fabric Production Figures Given

The Bureau of the Census reports that production of rayon broad woven fabrics dropped in the third quarter of 1946 in contrast to the upward trend in the three previous quarters. The total of 408.6 million linear yards produced during the third quarter was seven per cent less than in the second quarter of 1946, but 16 per cent greater than in the third quarter of 1945. Production of 100 per cent filament rayon fabrics, 100 per cent spun rayon fabrics and combination filament and spun rayon fabrics showed substantial decreases. The 12 million yards of pile, upholstery, drapery, tapestry, and the tie fabrics and 65.7 millon yards of all other rayon mixtures produced showed increases of nine and five per cent, respectively.

The statistics were compiled by the Bureau of the Census,

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More and more mill men are changing to Carter Travelers every day. The performance of these superior travelers more than justifies the judgement of these men in terms of improved yarn quality and reduced production costs.

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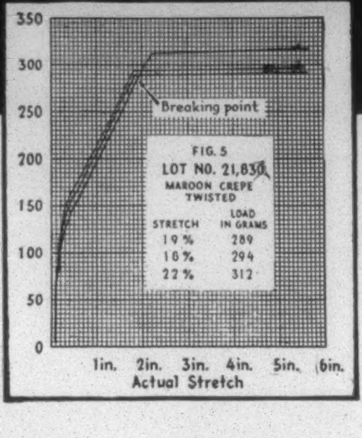
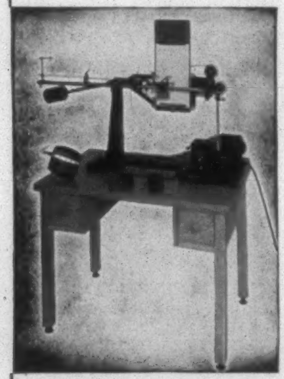
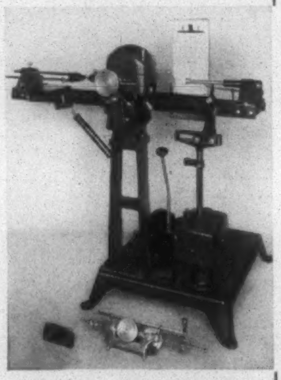




Model IP-2 Incline-plane light crepeage and tensile tester. Tests from single hair to 2,000 grams.



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industry division, for the administrative use of the textile division of the Civilian Production Administration. The data were obtained from reports received from manufacturers primarily engaged in weaving fabrics over 12 inches in width of cotton, silk, rayon and other synthetic fibers. All known manufacturers in this industry were canvassed; estimates have been included for the few manufacturers whose reports were not received in time for tabulation.

The A. A. T. C. C. Silver Jubilee Convention

(Continued from Page 43) a critical and, it is hoped, impartial review of the tire cord problem, with special reference to continuous filament cords of viscose rayon, nylon, glass and steel. No attempt is made to present new experimental results but published work is evaluated and information generally known in the tire industry is discussed. The complex question of cord construction is dealt with only briefly since it is assumed that each filament material requires a unique construction to bring out its optimum properties. The cost angle is likewise omitted from the discussion. A somewhat detailed analysis of the various steps in tire manufacture, as it involves the fabric, is given and the processing characteristics of the various filament materials are compared. The advantages and disadvantages of the creel method, as compared to the conventional woven fabric technique are brought out. Storage, dipping and drying problems are treated in some detail.

The service conditions of tire cord are tabulated under the headings: inflation stresses, dynamic stresses, impact stresses, and susceptibility to adhesion failures at elevated temperatures in the presence of moisture and oxygen. The requirements of an ideal tire cord are then set forth in terms of static, fatigue and impact strength, low creep, proper stretch, and chemical stability under various conditions of temperature and moisture. Finally, the several continuous filament cord materials are evaluated qualitatively in the light of these requirements.

The New York Section was declared winner of the international prize paper contest at the Saturday night banquet closing the record three-day convention. The paper of the Philadelphia Section was judged second best and Rhode Island's third. New York dealt with the tippy dyeing of wool, while Philadelphia discussed the effect of dye on fabric temperature and Rhode Island sought replacements for starch in millwork. Dr. Louis A. Olney announced the winners in the contest as head of the board of award. The seven papers entered in the contest are published in this issue. *(See Pages 44-49—Eds.)*

William D. Appel, retiring as president of the association after three years in that post, looked forward to the future of the organization with confidence, urging it to be alert to improve test methods as new knowledge permits, gear its research and its meetings to the needs of industry and co-ordinate its work with that of other similar groups.

Karl Taylor Compton, president of the Massachusetts Institute of Technology, was the featured speaker of the evening in a talk on "Five Atomic Bombs and the Future." He looked forward to wide application of atomic energy in peaceful fields, but pointed out that its use for commercial power was now awaiting development of the proper alloys to build an efficient engine.

The morning session was devoted to reports by all active committees working on research products during a general research committee meeting.

New Officers Elected By A. A. T. T.

The American Association of Textile Technologists, Inc., at a meeting in New York City Dec. 4, elected Ephraim Freedman of R. H. Macy & Co. as president of the group. Other new officers elected were George E. Linton of Central Needle Trades High School, first vice-president; Fred Noechel of Botany Worsted Mills, second vice-president; Bernice S. Bronner of the American Standards Association, secretary, and Ralph M. Gutekunst of Hellwig Dyeing Corp., treasurer. New directors named include Carl I. Taber of E. I. du Pont de Nemours & Co., Walter E. Scholer of American Viscose Corp. and Severn Miller of Wellington Sears Co., Inc—three years; Lewis M. Carpenter of Southeastern Cotton Mills, John J. Goldsmith of Hess-Goldsmith and Joseph Hirsch of Cyril Johnson Woolen Co.—two years; Dean Richard Cox of the Philadelphia Textile Institute, Stephen S. Marks of Fairchild Publications and William F. Macia of Stern & Stern—one year. Named to a new auditing committee were George Fuller of Cox & Fuller, Julius B. Goldberg of J. P. Stevens & Co. and George L. Baxter, Bradford Dyeing Association.

Third Quarter Finishing Figures Given

A total of 2,013 million yards of cotton, rayon, nylon, and similar fabrics were bleached, dyed, printed, and finished during the third quarter of 1946, the Bureau of the Census announced recently. This is 229 million yards, or ten per cent less than in the second quarter of 1946.

TOTAL YARDAGE BLEACHED, DYED, OR PRINTED
(In Million of Linear Yards)

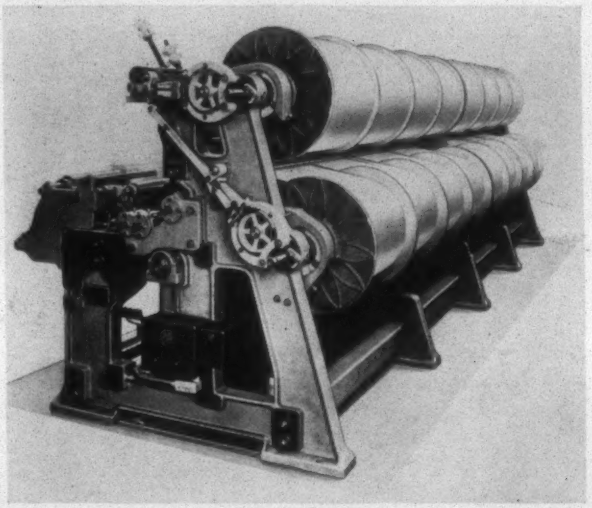
	~~July-~~ Sept. 1946, (Preliminary)	April-June, 1946, (Revised)
Bleached, dyed, or printed goods, total	2,013	2,242
Cotton	1,625	1,788
Rayon, nylon, and similar fabrics	388	454
Bleached and white finished goods, total	828	930
Cotton	786	878
Rayon, nylon, and similar fabrics	42	52
Plain dyed and finished goods, total	718	766
Cotton	449	467
Rayon, nylon, and similar fabrics	269	299
Printed and finished goods, total	467	546
Cotton	390	443
Rayon, nylon, and similar fabrics	77	103

Rayon Yarn Producers Raise Prices

Following the trend set by E. I. du Pont de Nemours & Co., five additional textile yarn producing companies have announced price increases on their products. Price increases were announced recently by American Viscose Corp., Aralac, Inc., Celanese Corp. of America, Industrial Rayon Corp., and Tennessee Eastman Corp. Except in rare instances, for high denier yarns and fibers, the five firms fell into line with Du Pont prices previously issued.

The Bobbin and Beaker, quarterly textile magazine, published by textile students at Clemson College, will be edited this year by Bill Bradwell of Sumter, with James K. Waites, Goldville, as managing editor. Other editorial positions announced recently as the publication plans its first postwar issue are Advertising Manager Louis B. Batson, Greenville; Circulation Manager Bob Sistrunk, Decatur, Ga.; and Reporters Harold R. Valerius, Clayton, Mo.; and Grady P. Robinson, Lancaster.

THIS *New* REINER high speed TRICOT MACHINE — Model RT-1 is now in successful operation in leading knitting mills throughout the country,



demonstrating its superiority, unexcelled speed, and quality of production.

Speed, economy, safety, and ease of operation have been stressed and welded into a harmonious whole. You may inspect this machine in our showrooms under actual mill conditions, so that you can see, judge, and compare for yourself.

This American-made machine takes 21-inch flange diameter beams, also the conventional 13¾-inch flange diameter beams. Knitting width 168 inches or 84 inches—28 gauge (English) or to your specifications. Pattern wheel or chain link drive.

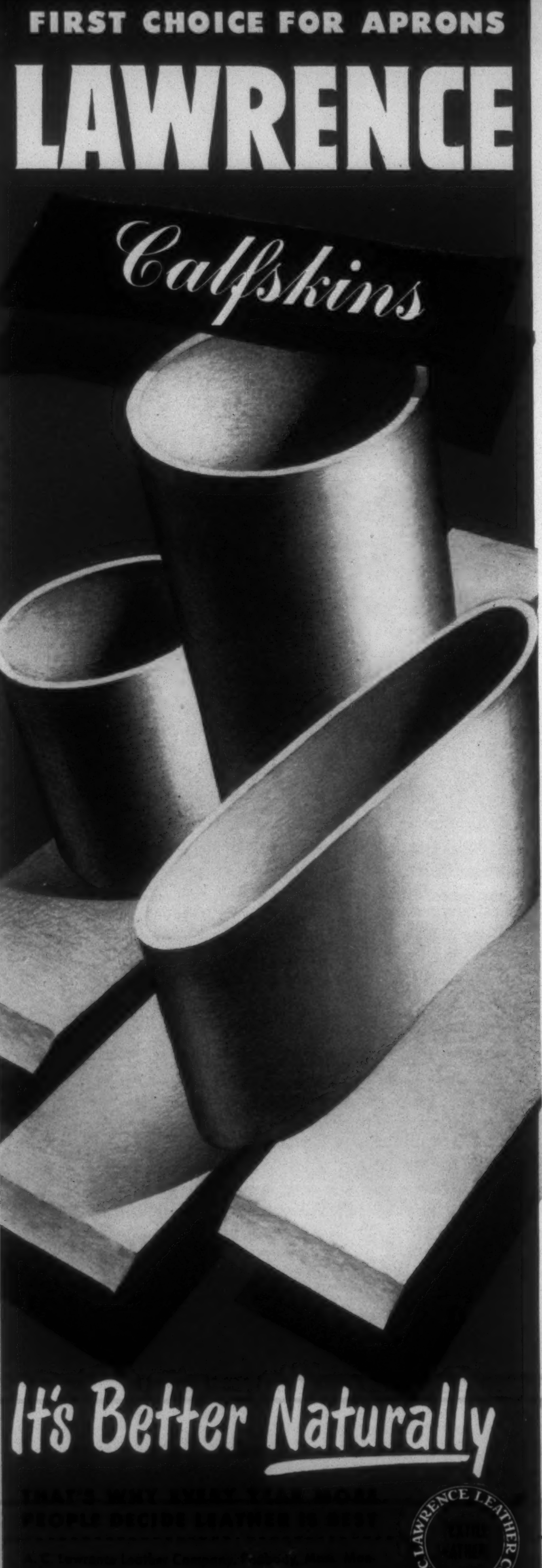
Reiner also offers warping equipment to take up to 24-inch flange diameter beams in all commercial widths. Ask for special folder.

To buy Reiner products means ready access to a fully interrelated line of machinery and their replacement parts—it means advice and services by Reiner experts—in short the fullest backing of an organization that has pioneered in the field of textile machinery since 1903.

ROBERT REINER, INC.

550-564 Gregory Ave. Weehawken, N. J.

**10 MINUTES FROM TIMES SQUARE. Take Bus Nos. 61, 67, 167 from the Times Square Public Service Terminal at 260 West 42nd Street, New York City. Get off at Pleasant Avenue, Weehawken, New Jersey. From there turn left and walk through the underpass up to Gregory Avenue. . . . . .
TELEPHONES: UNION 7-0502, 0503, 0504, and 0505.**



FIRST CHOICE FOR APRONS
LAWRENCE
Calfskins
It's Better Naturally
THAT'S WHY EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST
A. C. Lawrence Leather Company, Peabody, Mass. [illegible]
A. C. LAWRENCE LEATHER CO. PEABODY MASS.

Locate-Your-Plant-Here Campaigns

(Continued from Page 34) their choice. The availability of labor and its skill; the degree of past labor-management harmony; the liveability of the locality; its recreational facilities for workers and for executives; the local-area market for manufactured products; rail, air and water transportation facilities; power; natural resources; governmental inducements such as equitable taxation and political friendliness to industry; and the proximity of allied industries—these are the principal selling appeals used by locate-your-plant-here state advertisers.

In addition to advertising in business and general magazines to stress its transportation facilities, natural resources, labor supply and other factors plugged by competitive industry-advertiser states, Missouri pushes the "allied industry" appeal in specialized trade publications. Missouri's expected appropriation of $75,000 for the coming fiscal year will be spent, partly, on radio as well as magazine and newspaper advertising. Five thousand dollars is earmarked at present for broadcasting the state's advantages.

Even traditionally industrialized New England states are beginning to advertise their attractions. Two reasons prompt most of them—possible luring away of the plants they now have by advertising states, and the prospect of snaring additional production plums out of the current decentralization trend. The main theme of New Hampshire's advertising, which is supported by a state appropriation of $25,000, is the "*Plus* in every pay envelope"—good living conditions and recreational facilities which textile manufacturers locating in New Hampshire can offer to employees. Water supply, labor supply, power rates, etc., are used as secondary appeals to clinch the sale.

Like New Hampshire, Massachusetts' advertising has two aims—to keep present industrialists from migrating and to pluck post-war plants. One Massachusetts appeal emphasizes that "the GO light is on in Massachusetts." Ads using this recurring headline point out new factory construction, new public works, and the continuing prosperity enjoyed by the state's textile manufacturers. At present, much of the commonwealth's advertising is built around new developments at the port of Boston and at Boston's Logan International Airport—and how these help the Massachusetts textile manufacturer. A pretentious, plastic-bound volume, opening with a letter bearing the governor's signature, goes to inquirers. This lists in detail the state's advantages in the way of power, transportation, taxation, etc.

But it is the Southern states, which until the war were never industrialized to any appreciable extent, that strive hardest for industry placement. Texas, Louisiana, Mississippi, Florida, Alabama and North Carolina all have advertising campaigns aimed at bringing the textile industrialist down to the land o' cotton. In Texas, Louisiana, Mississippi, Florida and North Carolina, the campaigns are state-financed. Louisiana actually has two big time campaigns, one financed by the state, the other by a New Orleans business co-operative called Greater New Orleans, Inc. Greater New Orleans, Inc., now has some $150,000 collected for a national campaign which is already underway, and is collecting from its members another $100,000 which will be used to supplement the present campaign and to begin a campaign in Latin American countries.

Ads of both the co-op and the state stress the fact that New Orleans and Louisiana have changed, that they have become an industrial city and state as well as the land of pleasure they had always traditionally been. As a service to textile manufacturers answering the state-sponsored ads, Louisiana's Department of Commerce and Industry has set up an engineering service to make industrial surveys and gather technical industrial facts for interested manufacturers.

North Carolina aims its state-financed ads directly at definite classification of industry. Copy points out "North Carolina offers the textile industry unexcelled opportunities. Abundant raw materials; immense forests of hard and soft woods . . . a practically untapped coal field—mica . . . clay . . . asbestos . . . silica . . . soy beans and other agricultural products—cotton linters—hulls. Year-round mild climate. Plentiful hydro-electric power. Skilled and semi-skilled labor."

Government Textile Fiber Dealings Critized

(Continued from Page 33) and the wartime policy of building up raw wool reserves, the United States today finds itself in possession of large stockpiles which it cannot move. The stocks of government and privately owned wool at the end of September, 1946, was estimated to be 1,145,000,000 pounds, grease basis, three and one-half times the average end-of-September wool stocks during the 1935-1939 period, 25 per cent above the Sept. 30, 1944, figure and 35 per cent above that held at the end of September, 1945. Moreover the stock is equivalent to about three times the 1946 domestic clip.

Stocks of foreign wool acquired by the government as a war reserve have been entirely liquidated. Contrasted with the liquidation of the foreign-held wool is the stock of approximately 560,000,000 pounds, grease basis, of domestic apparel wool which the CCC holds, 47 per cent of the total amount purchased since 1943. Converting these current stocks from a grease to scoured basis, it is observed that the total domestic apparel wool stock held in this country at the end of September, both government and privately owned, amounted to 296,000,000 pounds. On the basis of the average monthly consumption in 1946, this stock is equivalent to a 42-month supply. On the other hand, stocks of foreign apparel class wool held at the end of September amounting to 192,000,000 pounds equaled only a 4½ months' supply on the same basis.

Comparison of domestic and foreign apparel class wool prices over recent years points up the dilemma faced by the C. C. C. in disposing of its domestic raw wool stock. The wide price differential in favor of imported wool, particularly during the war period, disappeared soon after V-J Day and until September of this year, foreign wools landed in the United States cost an average of nine cents per pound more than the domestic wools. The U. S. Tariff Commission is of the opinion that the normal price spread is about plus nine cents per pound for imported wool on the basis of the better preparation and smaller shrinkage. But in November foreign wools sold at about the same price as the domestic wools.

In November, 1945, and February, 1946, relatively low wool parity prices enabled the C. C. C. to lower its selling price. But in October, 1946, and again in November, C. C. C. was forced to increase its selling price five cents per pound on fine domestic wools because of upward adjustments in wool parity. On Dec. 2, the domestic selling price was again advanced and fine wools went up to $1.15 per pound. If the high levels of wool consumption cannot

TOP NAME IN ROLL COVERINGS
LAWRENCE
Spinna Calf
It's Better Naturally
THAT'S WHY EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST
A. C. Lawrence Leather Company, Peabody, Mass. Manufacturers of Lawrence Calfskins—1st choice for [illegible]
A. C. LAWRENCE LEATHER CO. PEABODY MASS.

WILLIAM R. NOONE & CO.

A. ERLAND GOYETTE, President
ARNOLD T. MALONE, Treasurer

105 Washington St. Boston, Massachusetts

Established 1831

NOONE'S
Standard Slasher Cloths

Ask for NOONE'S SLASHER CLOTHS by name or style number.

Long experience in manufacturing Slasher Cloths and continuous experimenting have enabled us to produce several types of Slasher Cloth, each especially constructed to give best results on the particular kind of yarn to be sized.

The proper Slasher Cloth for each type of yarn means properly sized warps, less loom stops, easier weaving, more and better production, and lower cost. We can supply you the right cloth for your particular work. On request, we will have our representative call and discuss Slasher Cloths with you.

We are the oldest manufacturers of Slasher Cloth in America. Our experience enables us to build a Slasher Cloth that will meet your most particular demand. Use NOONE'S SLASHER CLOTHS and be convinced.

Sole Agents For

The Joseph Noone's Sons Co.

Peterborough - - - - - New Hampshire

Use

NOONE'S ROLLER CLOTHS
NOONE'S SLASHER CLOTHS
NOONE'S CLEARER CLOTHS

be sustained because of a slump in textile production or prices, the disposal of the large C. C. C. stocks at present prices seems remote, the *Organon* concludes. The law probably will have to be changed to permit domestic wool sales below parity by the C. C. C. and the taxpayer will foot an even larger bill as the result of the government's extended foray into agriculture economics.

Use of Plastics To Strengthen Textiles

(Continued from Page 38) the household field, plastic treated yarns and cords are admirably adapted to making stronger and more durable venetian blind cords, sash cords, clothes lines, etc. Sewing thread of unusual strength is another product that has possibilities for every day use.

In the industrial field the applications range from combinations with rubber for hose and belting of various kinds to specialized fabrics which greatly simplify the making of laminated materials and yield a product of superior quality. Fabrics of plastic treated yarns for use in making various types of coated fabrics are equally as successful as in the laminating field.

A parallel development at the Dan River laboratories is the use of plastics in a simple and economical dyeing process that gives very fast and uniform colors to numerous types of natural and synthetic fabrics. This is known as resin-pigment dyeing.

Other developments in the use of plastics with textiles are yet in the research stage in the Dan River laboratories and it is believed by the chemists and physicists engaged in this work that only a beginning has been made in the new art of enriching the values and qualities of textile fibers and fabrics by treatment with plastics or other chemical derivatives.

Wool Group Discusses Sales Policies

Elmer Ward, president of Goodall Fabrics, Inc., addressing a meeting of the collateral group of the National Association of Wool Manufacturers in New York Nov. 19, expressed the opinion that the wool textile industry would not go back to wholesale selling, or jobber selling, such as led to profitless years in the past. "New concepts, new methods, new requirements, new materials, new precisions and new capacities are energizing afresh the entire textile industry," he said. "In like fashion, the initiative, knowledge and drive of most of the industry's younger executives and supervisory personnel, long cramped and frustrated by the prewar textile depression, now are growing at hothouse rate. Men who can get things done," he continued, "who can deal successfully with labor and public sentiment as well as with finance and production, are crowding to the top of industry. A new breed of textile leadership, consumer-minded as well as profit-minded, is coming into its own. All this tends to fortify the claims our industry has on the future for textiles and apparel in the American economy as against the apathy of yesteryear."

Other speakers heard by the group included Carroll D. Newell, president of Newell Textile Sales Co.; Arthur Besse, president of the National Association of Wool Manufacturers; Joseph Hirsch of Newell Textile Sales Co.; John Foge, Jr., of J. P. Stevens & Co.; Frank Moran of Lorraine Mfg. Co.; Fred Simmons of Montrose Worsted Co.; John Smith of Parker Wilder & Co.; Ernest Gilman of Pacific Mills and G. F. Geis of Buckley & Cohen, Inc. The next meeting of the collateral group is scheduled for Jan. 14 with A. D. Whiteside, president of Dun & Bradstreet, Inc., as guest speaker.

Flock Producers Using Much Rayon

A new and growing use of rayon today is its application in the form of flock to produce materials which may be used as table coverings, in window displays, jewelry boxes, wall coverings, shoe fabrics, and many other products, according to American Viscose Corp. When rayon is used, flock producers can obtain a very uniform fiber both in length and diameter. It dyes a brilliant shade and gives a lustrous product with a very fine hand. Rayon is particularly suitable for making first quality flock because it meets the required specifications, namely, straight fibers which can be cut to very uniform lengths as short as half a millimeter. The flocking trade endeavors to maintain this length within a tolerance of two-thousandths of an inch. For this reason, it is desirable to have fibers that have a high degree of parallelization and that separate readily when cut.

Flock can be applied to all types of backing materials including paper, fabric and metal, and forms an interesting and attractive product that looks very much like velvet. It is very soft and can be used in most applications where velvet is required. The flock is put on the backing material by various means such as blowing with a spray gun, electrostatic means, or by a beater bar. The electrostatic application is considered to be the best method of applying flock, however, since it produces a very dense and uniform pile. When the flock is to be applied, the backing material must first be treated with an adhesive and for this purpose a resin is very frequently used.

World Wool Output in 1946 Approximates 1945

World wool production in 1946, estimated at 3.7 billion pounds, is about the same as the 1945 output and the pre-war average, but world wool supplies are much larger now than before the war because of stocks accumulated during the hostilities, according to the U. S. Department of Agriculture. Wool production increased sharply early in the war, chiefly in the United States and the southern hemisphere in response to higher prices, but has dropped ten per cent since 1943. Drought in Australia and South Africa, labor shortage and competition of other farm products in the United States, and wartime disruption in Europe and Asia have been factors in the decline.

In the principal fine wool producing countries—United States, Australia and South Africa—total wool production fell to 1.5 billion pounds in 1946, the Office of Foreign Agricultural Relations reports, compared with the record wartime output of 1.9 billion, and a pre-war (1934-38) average of 1.7 billion. Continued production declines are reported for the United States and South Africa in 1946, while a slight increase is indicated for Australia.

In the southern hemisphere, source of two-thirds of the world's wool production rose one per cent in 1946 to 2.3 billion pounds, according to preliminary figures. This is nine per cent below 1943, but eight per cent above pre-war. Northern hemisphere wool production in 1946, exclusive of the Soviet Union and China, is estimated at only 1.1 billion pounds, which is five per cent below the previous year and 15 per cent smaller than pre-war.

World stocks of wool on June 30, 1946, were estimated

Your Paper, Sir!

YES, here it is—in a somewhat raw state, to be sure. But in due course this forest monarch may show up in textile establishments as baling papers, cone wraps, sealing tapes, or any number of standard paper products and specialties.

And thanks to HENLEY'S strong position with primary paper sources, it isn't a long time between pulp processing at the mills and appearance of finished paper in HENLEY warehouses.

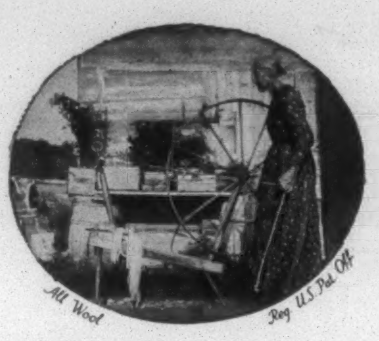
There are four of those, you know. Each is situated at a key shipping point to serve southern textile industries with all the promptness that our own incoming shipments permit.

Buyers who tie in their needs with HENLEY supply service, find that their paper problems are materially decreased!

Please Address High Point Office

HENLEY PAPER Company
Formerly— PARKER PAPER CO.

Charlotte, N. C. HIGH POINT, N. C. Gastonia, N. C.
Southern Paper Products Division, Asheville, N. C.



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ROLLER, SLASHER AND CLEARER CLOTH
SANFORIZING BLANKETS
SLASHER JACKETS
ENDLESS REVOLVING CLEARERS

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for de-sizing cottons, rayons and mixed goods

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Assures rapid, dependable de-sizing.

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Our technical staff always at your service.

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WALLERSTEIN COMPANY, INC.
180 MADISON AVENUE • NEW YORK 16

at five billion pounds, about the same as the previous season's carryover, but three times as much as before the war. Despite the size of these stocks, the outlook for disposal appear better than a year ago because of movement of large quantities of British Dominion wool from governmental to private ownership during 1945-46. Supplies still are very large, however, and of the five-billion pound carryover, 2.6 billion pounds still are owned by governmental organizations. Of this latter total, the United Kingdom-Dominions Wool Disposal, Ltd., holds, 81 per cent, and the Commodity Credit Corp. in the United States the remainder.

Membership of a wool advisory committee—consisting of representatives of growers, handlers, and manufacturers—has been announced by the Department of Agriculture. The initial meeting of the group was held Nov. 21 in Washington. Purpose of the group will be to assist the department, through industry counsel and information, in administration of its wool merchandising program. This assistance will bear on such activities as the appraisal, handling, storing, transportation, and selling of wool purchased by the Commodity Credit Corp. under the wool support program.

Members of the committee include R. S. Bartlett, vice-president in charge of manufacturing for Botany Worsted Mills, Passaic, N. J., and J. H. Nichols, Jr., assistant treasurer of Nichols & Co., Inc., wool processing firm at Boston, Mass. Chairman of the committee is H. E. Reed, director of the D. A. production and marketing administration's livestock branch, under which the department's wool merchandising program is handled.

At its initial meeting the group held general, exploratory discussions on a number of subjects. These included the purpose and functions of the committee, the current status of the wool support program, purchase phases of the program, and sales activities.

A. S. T. M. Committee Studies Consumer Stand

At the recent three-day meeting of Committee D-13 on Textiles of the American Society for Testing Materials, Prof. H. J. Ball, chairman, aroused much interest at a meeting of the advisory committee of D-13 in his report of progress which has been made by the society on the development of consumer standards. In 1945, announcement was made of the intention of the society to extend its standardization activities to the field of ultimate consumer goods, and an administrative committee on ultimate consumer goods, with Professor Ball as chairman, was appointed to develop the necessary procedures.

Professor Ball informed the meeting that the general policy of his group at present is to lay primary emphasis on the development of methods of test which will evaluate the end-use values of consumer goods. He read an advance copy of an article, which has since appeared in the October issue of *A. S. T. M. Bulletin,* which describes the work and plans of the administrative committee and presents suggested forms for "standard methods of test" and "standard specifications." These forms embody all pertinent ideas to date.

It is the intention of the society to base its standardization work in this field of ultimate consumer goods upon sound engineering principles and practices as it has done so successfully heretofore in the field of industrial goods. Reprints of the article entitled "Progress in Work on Ultimate

Consumer Goods" may be secured by writing to American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa.

An afternoon session devoted to a description of some of the principal testing techniques and instruments developed by the Germans was another feature of the recent meeting of Committee D-13. A three-part talk was given by Dr. Lyman Fourt, research associate of Milton Harris Associates; Richard T. Kropf, director of research, Belding Heminway Corticelli Co.; and Herbert F. Schiefer, senior physicist, National Bureau of Standards. These men were part of a team which investigated textile testing in Germany.

The key items in this field in which the Germans had made much progress were highlighted. Among the instruments which were illustrated by lantern slides and the use of which was described were: tensile-strength testers for single fibers, yarns and fabrics; the magnetic strain-gage; abrasion testers, flexure testers and instruments for measuring thermal insulation of fabrics.

The combined papers on "Textile Testing in Germany" will be published in an early issue of *A. S. T. M. Bulletin* and preprints can be obtained from the American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa.

As is customary, during the three-day meetings of Committe D-13 the several sub-committees under whose direction the work of D-13 is conducted met and reported on work in progress, discussed and acted on proposed changes in standards, proposed new methods, and outlined new work to be undertaken.

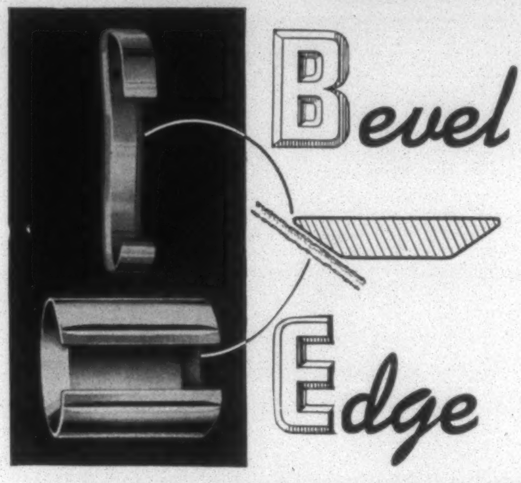
So much interest was shown in the need for work in the field of knitted materials that steps were taken to organize a sub-committee in the field of knitted fabrics and hosiery.

In line with the society's recently announced policy of actively engaging in work on standards for ultimate consumer goods, Sub-Committee A-6 on Household and Garment Fabrics is organizing to actively work in this field. The rapid rise in the demand for improving and maintaining quality in consumer goods is placing an increasing pressure upon testing laboratories everywhere to develop methods of testing and inspection which will accurately determine the relative quality of merchandise, and which will insure the maintenance of standards established for a given product.

The committees on wear-testing and abrasion were largely attended and a special effort is being made to correlate laboratory tests with the results of actual wear. In connection with sampling for inspection and testing, one of the important, but less publicized developments of the war, is a sampling technique known as "sequential" sampling. The Quartermaster Corps Inspection Service applied sequential analysis on a large scale, and during the war it was considered to be such an important means of conserving manpower and equipment that dissemination of information concerning its use was restricted to personnel directly connected with planning and research in war production. At the meeting of Sub-Committee B-2 on Nomenclature and Definitions, David H. Schwartz of the Quartermaster Corps Inspection Service described this new technique, and a discussion pro and con concerning its merits followed.

The extensive research which is being carried on in many directions is expected to shed new light on the philosophy behind the different properties and the behavior of textile fibers and textile materials. The net result will be greater variety of merchandise, engineered for specific end uses, improved quality and greater consumer satisfaction. The

Different and Better!



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Promotes smoother running
Safeguards quality

Anti-friction rings—U. S. "Bevel Edge" anti-friction travelers, both are especially timely because they promote maximum production from existing spinning and twisting machinery. Some of the direct benefits from the Bevel Edge travelers are stated by users as follows:

1. **Less loading up of travelers on cotton.**
2. **Less fly waste on woolen.**
3. **Minimizes split ends on rayon, and silk.**
4. **Much lower end breakage—frequently 8 to 10 fewer per hour.**
5. **More uniform tension—more uniform yarn.**

NOTE: Selection of the correct size and weight, in which our men assist, is extremely important to assure MAXIMUM results.

U. S. Travelers are made
and stocked in ALL styles.

DEPENDABLE DELIVERY-PROMPT SERVICE CALLS

U. S. RING TRAVELER CO.
AMOS M. BOWEN, President & Treasurer
Providence, Rhode Island

"U. S." Men give you Prompt Service!

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O. B. LAND—Athens, Ga.—Box 1187—Phone 478
T. L. MAYNARD—Belmont, N. C.—Box 456—Phone 115
M. L. BOLTON—West Philadelphia—Box 7234—Trinity 1438
H. R. FISHER—Concord, N. C.—Box 83—Phone 8988
C. W. SMITH — H. J. SMITH — L. H. MELLOR, JR. — Providence—Gaspee 0100

next meeting of D-13 will be held at the Park Central Hotel in New York City March 12-14, 1947.

Steel May Steal Tire Cord Business

The textile industry is today facing competition from a new source—the steel industry—with the recent announcement that the steel industry is now producing in commercial quantities an exceedingly fine wire thread, designed to replace textile cord in tires for heavy trucks, such as are utilized by operators of large farms and motor freight lines. In the past wire has been used extensively in tires to provide a core for the bead which holds the casing on the rim of the wheel and it was pointed out that the new steel threads, only .0059 of an inch in diameter, are used to form the plies, or layers, of material which are saturated with rubber and form the inner core of the tire. Three of the fine wires are twisted into a strand with six strands laid around a central core, forming a cord $\frac{1}{32}$ of an inch in diameter. Numbers of these cords are placed parallel with each other and coated with rubber forming what has been described as a ply of great strength and resistance. Spokesmen for steel interests claim that four metallic plies are equivalent in strength and durability to about 20 fabric plies commonly used in heavy-duty tires.

British Government To Aid Mills

A five-year plan for the reorganization of Great Britain's cotton textile industry was presented to all elements of the industry Dec. 3 by Sir Stafford Cripps, president of the Board of Trade. Under this plan the government will meet 25 per cent of the cost of new and modern equipment for cotton textile plants. Speaking in Manchester, the nation's textile center, Mr. Cripps said "the government will be prepared to make a grant of 25 per cent towards the cost of mechanical re-equipment (but not of buildings), provided the re-equipment is carried out within a fixed period and in agreed stages." The governmental proffer of financial help in purchasing equipment, he added, was considered only for the cotton goods industry "because of the very special difficulties" it faces. He did not estimate the cost of the program, which is the only one of its kind planned for any British industry.

John Boyle Heads Atlanta Textile Club

John G. Boyle of Eagle & Phenix Mills was elected president of the Atlanta (Ga.) Textile Club at the annual election of officers held at the Ansley Hotel in Atlanta Dec. 3. He succeeds William C. Horton, Jr., of Patent Button Co. Other officers elected at the meeting were Ansel B. Cook of Callaway Mills, Inc., vice-president; Eugene D. Cogburn of Dan River Mills, Inc., secretary, and Robert de Castro of Joshua L. Baily & Co., treasurer. Named to the steering committee to serve with the president and vice-president were Don Hawley of Wellington Sears Co., Inc., W. H. Morrison of Turner Halsey Co., and the retiring president, Mr. Horton.

A new organization, the American Textile Designers Association, was formed recently following a meeting of leading textile design studios in New York City, it was announced by John J. Maibach, president of Foremost Studio Inc. No officers were elected at the organizational meeting and the date of the next meeting will be made known soon.

Is your mill planning
EXPANSION or MODERNIZATION?

If your contemplated new buildings require modern elevated tanks for sprinkler or general service—

If new products call for new kiers, kettles, vats or vessels in special alloy steels—

. . . then our engineering department (with long experience in servicing the textile industry), can be of *real service* to you. Submit us your problems, or write for a copy of "Tank Talk."

R.D. COLE MFG.CO. ESTABLISHED 1854
Newnan Ga.

TANKS TOWERS CYLINDERS VESSELS

80 YEARS
of service to the
TEXTILE INDUSTRY

We have supplied starches, gums and dextrines to the Textile Industry since 1866.

This long experience helped to give us the know-how in solving many wartime sizing, finishing and printing problems, and in meeting critical shortages by developing satisfactory substitutes.

Call on us for help in solving your postwar problems. Our Textile Laboratories and Field Staff are at your service.

STEIN SH HALL
EST. 1866

285 Madison Avenue New York 17, N.Y.
1011 Johnston Bldg. Charlotte 2, N.C.

Dye Kettle Loading Method Perfected

Riggs & Lombard, Inc., of Lowell, Mass., manufacturer of textile machinery, announces that one of its customers has perfected a steam injection method of introducing dyes into dye kettles which assures even distribution and therefore more even dyeing. The mill has permitted Riggs & Lombard to report details of the new method for the benefit of the industry. The system consists in part of a steam pressure line leading to a perforated pipe extending into and across the false front on piece dye kettles, and into the expansion tank on stock dye kettles. This steam line forms the top of a T, the bottom of which leads into the dye mixing barrel. A partial vacuum is created by insertion of a venturi tube into the steam line at the joint of the T, sucking the dye liquor out of the barrel into the line. Thence, the liquor passes directly through the steam line and the perforated pipe into the kettle.

Using this method it is a simple matter to get absolutely even distribution of the dye liquor in the kettle and to accurately control the amount of injection merely by turning a valve in the line to regulate the flow of steam. Risk of serious burns to the operator is also greatly reduced. As used at present this system calls for one dye liquor container for each dye kettle or for every two kettles, but there is no reason why the liquor cannot be distributed by one of several means to each dye kettle through a pipe line from one master container in the mixing room and then sucked into the kettles by the steam injection method. Such a practice would certainly eliminate a lot of trucking, rehandling and spilling of dye liquor, to say nothing of manpower. It appears to be perfectly feasible, since the same principle has already been successfully applied by this company in the development of its soap distributing system.

Sectional Safety Group Holds Meeting

The Mid-State Safety Council, composed of representatives of industrial plants in the Piedmont Section of North Carolina, convened recently in Durham and elected Glenn E. Penland of Durham, director of training and safety at Erwin Cotton Mills Co., president of the group. D. F. Lanier, superintendent of Oxford Cotton Mills, Oxford, was elected vice-president; M. E. Allison, safety director of Eno Cotton Mills, Hillsboro, was elected treasurer, and L. D. Styron, plant superintendent of the Durham Telephone Co., was named secretary.

E. G. Padgett, director of safety on the North Carolina State Industrial Commission, was the principal speaker at the meeting, his topic being "Safety Methods in Industrial Plants." Ernest M. Hunter of Durham Hosiery Mills, former president of the council, presided over the meeting which was held in the auditorium of the Erwin Cotton Mills Co. The next meeting of the group was set for the fourth Friday in February with Raleigh as the site.

Cotton-Textile Institute Adds Members

The Cotton-Textile Institute announces that the following mills have been elected to membership: Blanche Cotton Mills, Augusta, Ga.; Fifth Operating Corp., Du Court Mills, Kings Mountain, N. C.; Braitex Mfg. Co., East Norwalk, Conn.; Braided Fabrics Co., Providence, R. I.; Heywood Narrow Fabrics Co., Fall River, Mass.; Star Braiding Co., Pawtucket, R. I.; Turner & Stanton Co., Norwich, Conn.; and United Lace & Braid Co., Cranston, Mass.

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Cotton Council To Discuss Foreign Trade

Cotton's foreign trade prospects will be the theme subject of the National Cotton Council's ninth annual meeting at Galveston, Tex., Jan. 28-30, according to Oscar Johnston, president of the council. The 250 official delegates, representing the entire raw cotton industry, are scheduled to work out plans for a full-scale program to better the position of American cotton in overseas markets which formerly accounted for 50 per cent of cotton's markets, Mr. Johnston said.

In preparation for the formal planning, Read Dunn, Jr., of Washington, director of the council's foreign trade division, has been in Europe since September making a detailed economic survey of the place American cotton can occupy in the European fiber market in the years ahead. Mr. Dunn will return to the United States just prior to the council meeting.

Although foreign trade will be given major consideration by the representatives of the six branches of the cotton industry, Mr. Johnston said that a complete program will be developed in Galveston for the intensification of the council's activities in the fields of research and sales promotion.

"Enactment into law of the Hope-Flannagan Agricultural Research Bill during the last session of Congress for the first time has given cotton research opportunities comparable to those of its artificial fiber competitors," the council leader asserted. "One of the prime jobs of the industry will be the inauguration of a program which will enable cotton to utilize wisely the research funds which may be made available to it under this new act." The Hope-Flannagan Bill authorizes Federal expenditures for agricultural research up to $61,000,000 annually after five years. Under the bill, initial funds can be made available during the forthcoming session of Congress.

In addition to program planning, the council meeting will feature addresses by Secretary of Agriculture Clinton P. Anderson and Council President Johnston. Both will speak Jan. 28, opening day of the meeting. Sessions of the convention will be open to all members of the cotton industry, Mr. Johnston said. It is expected that total attendance at the meeting will pass the 600 mark.

New England Argues About First Mill

There is little doubt as to where the heart of the cotton textile industry is located now, but in history-minded New England there is currently raging a heated, though friendly, discussion concerning which city can claim the honor of being the birthplace of the vast industry. The newest subject of claims and counter-claims resulted from a notice recently distributed to mill bulletin boards stating that the country's first successful cotton mill was established in Pawtucket, R. I., by Samuel Slater in 1790, a fact garnered from encyclopedias and history books. Citizens of Beverly, Mass., however, immediately challenged this statement, claiming the first cotton mill was built in their town several years before Slater erected his factory. They point to a stone tablet in Beverly bearing this legend: "Here the first cotton mill in America was built, 1787; incorporated Feb. 3, 1789; visited by Washington, Oct. 30, 1789; burnt, 1828." Beverly citizens further cite an old edition of the *Encyclopedia Britannica:* "The first mill was erected in 1788, that of the Beverly association." Historians who support the Pawtucket site as being the birthplace of the industry base their contention on the fact that it was the first successful mill making use of the Arkwright frame and principles which are the basis of present-day cotton textile manufacture, pointing out that if this is not to be accepted as the beginning of the industry in America, then historians could, in all fairness, go back to the hand looms used by the earliest settlers.

Announce Plans for Textile Seminar

The National Textile Seminar sponsored by the Philadelphia Textile Institute will be held through the week beginning May 12, 1947, at the Shawnee Country Club, Shawnee on the Delaware, Pa. The arrangements permit a broader scope of endeavors with a larger attendance than was possible at Hershey, Pa., and the time of the year more conducive to the general approach of matters pertaining to the entire textile industry. James Marshall Cole, vice-president of Cold Spring Bleachery, Yardley, Pa., will again take over the chairmanship of the committee, which is the same that guided a most successful seminar for top flight executives at the memorable Hershey innovation in textile affairs.

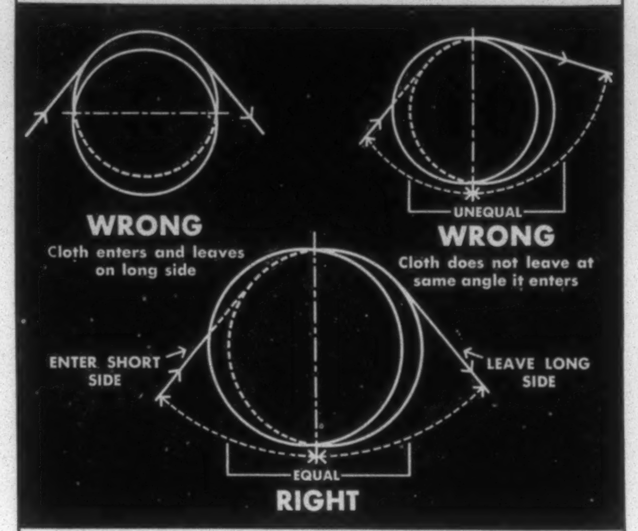
The committee is as follows: Alban Eavenson of Eavenson & Levering, Camden, N. J.; Rinaldo A. Lukens, vice-president of Continental Mills, Inc., Philadelphia, Pa.; Carl C. Mattmann, Jr., Textron, Inc., New York City; M. Earl Heard, director of research, West Point (Ga.) Mfg. Co.; and Theodore B. Hayward, manager of wool department, Swift & Co., Philadelphia, Pa.

M. Earl Heard will preside as seminar chairman. All are members of the board of governors of the Philadelphia Textile Institute. H. Wickliffe Rose, assistant to the president of American Viscose Corp., Wilmington, Del., is chairman of the board. A general survey is being made for a propitious development of subject matter and in this connection everyone conversant with the textile industry readily acknowledges there is a wealth of material for further enlightenment.

Insect Resistance Standard Is Proposed

The National Bureau of Standards of the Department of Commerce has announced distribution of a new proposed Commercial Standard for Felts, and Woven and Knitted Fabrics and Yarns Treated to Resist Insect Attack, TS-4262, as submitted by the American Association of Textile Chemists and Colorists in collaboration with the American Society for Testing Materials and the National Association of Insecticide and Disinfectant Manufacturers, Inc. This draft is an adjustment of a previous draft, TS-4197, originally distributed Aug. 18, 1946, and the adjustments represent the composite recommendations received from the trade and those made at conferences of representatives of the committees of the various trade groups. Principal changes included in the new draft include (1) the broadening of the scope to include felts; (2) the inclusion of a minimum damage of the control specimens to permit acceptance of results obtained on the other specimens; (3) limiting the life cycle test to mill treated fabrics, felts and yarns; (4) modifying the size of the life cycle cabinet to permit the use of other sizes than that specified; and (5) a general rearrangement of subject matter under Methods of Test for Clarity.

Mount Hope Free-Wheeling EXPANDER


WRONG
Cloth enters and leaves on long side
UNEQUAL
WRONG
Cloth does not leave at same angle it enters
ENTER SHORT SIDE
LEAVE LONG SIDE
EQUAL
RIGHT

HOW TO USE THE MOUNT HOPE FREE-WHEELING EXPANDER

There are many ways in which cloth can be led over this expander, but only one which will give the best results.

Shown above is a Mount Hope Free-Wheeling Expander with cloth going over it in three different ways. The first two methods are incorrect, because the cloth enters and leaves on the long or convex side in the first, and does not leave at the same angle at which it enters in the second. The third, and correct way, is to have the cloth enter on the short or concave side and leave on the long or convex side at the same angle at which it entered. This method alone gives maximum effectiveness to the Expander.

Advantages of the Mount Hope Expander, *if used properly*, are as follows: —

- **Because the warp is subjected to minimum tension less bow than usual is required, resulting in extra long life for the Neoprene surface of the expander.**
- **Expanders may be set at any desired angle to the cloth to adjust the amount of widthwise stretch produced.**
- **Ball bearings, grease packed, are securely mounted in steel spools to outlast many Neoprene sleeve coverings, and so designed that they cannot stick nor turn on the axle and cut it.**
- **This expander is suitable for all fabrics, including rayon marquisette and rayon and cotton tire cord, plastic film and paper.**
- **We will be glad to assist you, free of charge, with your cloth opening, guiding, or cross-stretch problem.**

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Cites Versatility of Ceglin Finishes

Ceglin cellulose ethers have a versatility not found in the usual cloth finishing compounds because the characteristics of the type of ether used, the coagulating agents, the construction of the fabric and the processing technique all combine to determine the final effect, according to J. J. Casserly of the Sylvania Division, American Viscose Corp., who discussed these compositions at a meeting of the American Chemical Society at Hickory, N. C.

Several types of Ceglin alkali soluble cellulose ethers are manufactured, Mr. Casserly explained. All of them coagulate as a water insoluble deposit and this reaction may be brought about by any of three different methods, each of which has definite effect on the physical nature of the material deposited. In the first method the caustic is usually neutralized by an acid, or an acid-forming gas can be used; in the second method, the caustic content may be extended beyond the solvent limits, either by diluting with water, or by increasing the concentration of caustic, or evaporating the water of solution by heating; and third, by adding a highly ionized salt to the solution.

Generally speaking, the rapidity with which any of these methods are used is reflected in the hardness of the coagulated material. A five per cent concentration of sulphuric acid will deposit a firm film whereas the same concentration of acetic acid will produce a softer, more flexible material. This same variation may also be observed when identical solutions are subjected to the rapid addition of a highly concentrated caustic solution as against a slow dilution with water.

The character of the ether deposit on any given cloth is largely determined by the degree of the film-forming properties of the ether used, Mr. Casserly added. Finishes range from the firm linen-like damask, highly resistant to repeated laundering, which is obtainable with high viscosity ethers, to the soft, full, lofty effect received from the comparatively non-film-forming types. Between these two extremes are produced a variety of results determined by selection of the most suitable types and percentages of ethers. Further variations in the finish appear with changes in the processing, Mr. Casserly said. The manner of application often determines the amount of the ether solution picked up and the penetration of ether into the fabric. In addition, the Ceglin-treated cloth tends to retain the form which it has at the time the ether is coagulated.

Everett Sees Large Canvas Goods Trade

Over the next three years volume business in cotton canvas goods will average at least 20 per cent above the prewar average, Charles K. Everett, director of merchandising for the Cotton-Textile Institute, told the Ohio-West Virginia Canvas Goods Manufacturers Association at its annual meeting recently. The vast increase in the uses to which canvas goods can be put, as a result of wartime experiences, plus the fact that qualities have been substantially improved through the perfection of finishes which resist fire, mildew and other destructive factors, were cited by Mr. Everett as the main reasons for the expansion in business he predicted.

Also, he pointed out, a vast replacement business remains to be done for over the last five years, when production was earmarked almost wholly for military purposes, many canvas items such as awnings, machinery covers, locomotive cabin curtains, building tarpaulins, coal and ice carrying bags were out. Makers of air conditioning equipment, he said, have discovered that awnings on buildings in which this apparatus is installed cut down operating costs impressively, the result being that they are likely to become a customary adjunct to such installations.

He warned his hearers, however, that once the immediate post-war boom is over, streamlined merchandising methods will be needed to defend and preserve the competitive position of canvas goods against a host of new products. More research aimed at improving the design and mechanical features of awnings and other canvas items is sorely needed, he declared.

Cotton goods for canvas purposes will be available in larger volume during 1947, he stated, but warned that amounts produced by mills may fall short of fully satisfying all demands. In pre-war years canvas goods annually accounted for the consumption of about 200,000 bales of cotton. Indications now are that for some time to come there will be a greatly increased demand and that consumption of cotton duck, twills and drills and other weaves suitable for use in fabricated canvas products will continue to show sharp increases over pre-war levels.

Materials Handling Society Is Formed

A group of over 50 specialists in materials handling at a second dinner meeting held recently at Philadelphia joined hands and united to form a permanent organization. By interchange of ideas and close personal contact, the group proposes to advance the application of sound materials handling practice for the mutual benefit of all concerned. J. B. McGinn of American Viscose Corp. has been named temporary chairman of the organization.

Materials handling has become a most important function in today's industrial set-up. Skillful co-ordination, aided by mechanization, is held to be the key to increased productivity of labor, presently at low ebb, and now aggravated by actual labor shortages in many lines. Membership is open to all interested in the problems of materials handling. Higher efficiency in this calling is the prime objective of the newly-formed group.

The next dinner meeting will be held Friday evening, Jan. 10, 1947, at the headquarters of the Electrical Association in the Architects Building at 17th and Sansom Streets, Philadelphia. During the dinner opportunity will be taken for round table discussion in several different phases of most modern procedure. Following the dinner an illustrated talk will be given by an expert on newly devised methods of palletizing. It is proposed to hold meetings each month throughout 1947 with snappy, instructive programs demonstrating the latest developments in this particular field of activity.

"New Chemicals for Industry" was the subject of a talk delivered recently by Dr. R. L. Bateman, manager of the fine chemicals division of Carbide and Carbon Chemicals Corp. He spoke before the industrial group of the Pittsburg Section of the American Chemical Society Dec. 3, at the Mellon Institute. Dr. Bateman discussed some of the new chemicals that are helping to make new and better consumer goods. Among those mentioned was glyoxal, which has been successfully applied to stabilize or shrink-proof spun rayon textiles. A related chemical—methyl glyoxal, or pyruvic aldehyde—a still newer product to be introduced commercially, was mentioned.

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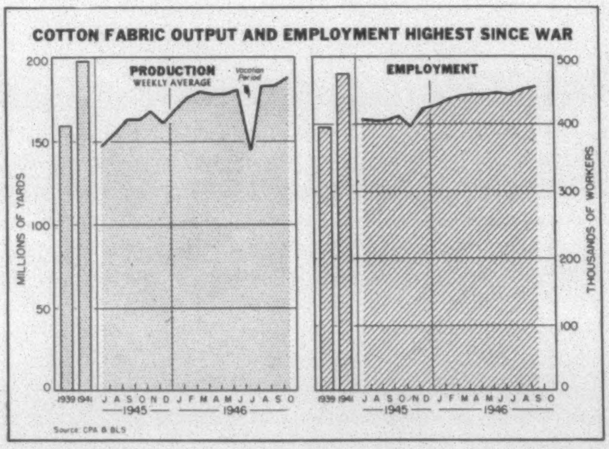
Cotton Goods Market

Set-asides for export by cotton mills of broad woven fabrics will be discontinued Dec. 31, the Civilian Production Administration has announced. It was stressed, however, that this action by C. P. A. does not in any way affect the export licensing requirements of the Department of Commerce.

Lifting of export set-aside requirements was made possible, C. P. A. said, because production in the United States of cotton fabrics has increased steadily and is now running at an annual rate of 9.7 billion linear yards. It was also believed that ending of price controls on cotton fabrics would make procurement for export easier. Also, acute shortage conditions in cotton textiles in a number of foreign areas had been considerably eased, C. P. A. said. This action followed the modification of the set-aside order, M-317A, for the fourth quarter, to eliminate mills' set-asides of cotton bagging, industrial and agricultural uses and components for apparel, excepting those for men's suits.

Set-asides of broad woven fabrics were incorporated in M-317A during December, 1943, so as to insure sufficient quantities of cotton fabrics for lend-lease commitments and to take care of other foreign requirements of high urgency, notably those of liberated and devastated areas in the Far East. Before the war these countries had been largely dependent on Japan for broad woven fabrics.


COTTON FABRIC OUTPUT AND EMPLOYMENT HIGHEST SINCE WAR

Source: CPA & BLS

Customers of the bag manufacturers are showing plenty of resistance to high prices, it is pointed out in bag trade circles, and this is the chief reason why several houses are going easy on forward purchases at the present time. Goods bought at the O. P. A. levels are acceptable, one leading bag concern says, but where the asking price has been boosted to ten and 15 per cent up, then an entirely different situation presents itself.

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Cotton Yarns Market

Major selling activity in sale yarns during recent days consisted of disposal of odd lots, Philadelphia market sources disclose. Few spinners are booking forward orders at the present time, it is stated. Dealers say that while there is no consistent flow of yarn in the market, numerous buyers are more ready to resell yarns they purchased in recent months as substitutes for regularly used kinds. Numerous buyers are hopeful they will be in a better position during the new year to secure requirements in yarn and a further stiffening against acceptance of so-called substitute shipments is anticipated.

Distributors observe that manufacturers who accepted 40s-2 in place of wanted 80s, are now offering substantial quantities of the plied yarns for resale. At the same time, a warning is sounded by veterans of the market that there is no present indication that fine yarns will suddenly ease up. Sale of mills producing numbers such as 80s has considerably reduced the potential production of sale yarn in such numbers, it is urged.

The rash of selling by second-hands which broke out immediately following the revocation of price controls, is still in progress in some sections of the market, distributors reveal.

Attempts of customers to resell yarn supplies back to suppliers were frequently observed in the first days of the new free market, but of late, such offers have fallen off considerably. Current reports, however, indicate that some yarn dealers still are receiving numerous bids to purchase yarns by this method.

There have been instances in recent weeks when suppliers have decreed that buyers must engage in tie-in transactions. Such "deals," observers believe, are in the minority, however, and are not exercised by the reputable spinning establishments.

End of the rail freight embargo caused a noticeable relaxation in the yarn market.

The final 1946 estimate on the size of this year's cotton crop, announced Dec. 9 by the Agriculture Department's crop reporting board, set the total at 8,482,000 bales. The department said this was only 5,000 bales under the estimate of Nov. 1, made public a month previously. Comparing the 1946 crop with 1945, it was 5.9 per cent smaller. And compared with the small 1921 crop, the 1946 yield was estimated to be only 537,000 bales greater.

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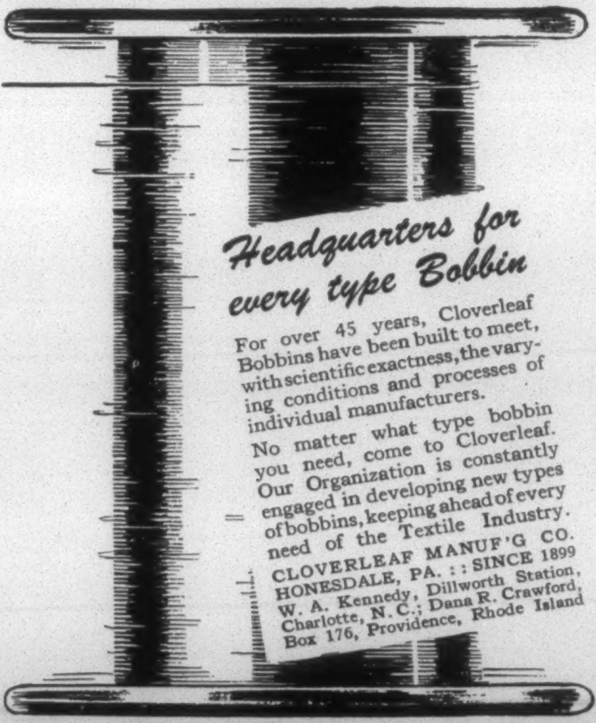

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Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ACME MACHINE & TOOL CO., 2516 Wilkinson Blvd., Charlotte, N. C.

ACME STEEL CO., 2838 Archer Ave., Chicago, Ill. Sou. Office and warehouse, 603 Stewart Ave., S. W., Atlanta, Ga., F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carroll, 523 Clairmont Ave., Decatur, Ga., Phone Dearborn 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn., Phone Chattanooga 5859; J. W. Webb, 633 Moreland Ave. N.E., Phone Cr. 5043, Atlanta, Ga.; G. R. Easley, 304 McPherson Lane, Phone 6157-W, Greenville, S. C. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

AKRON BELTING CO., THE, Akron, O. Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenvile, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.; Oliver D Landis, N. C. Agent, 7718 Queens Rd., Charlotte 4, N. C.

ALLEN CO., THE, 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

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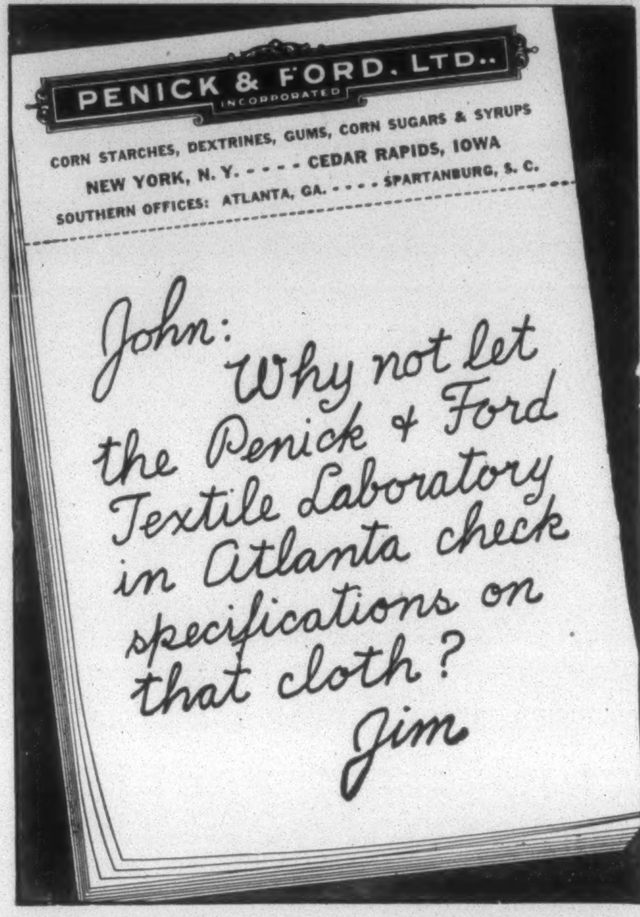
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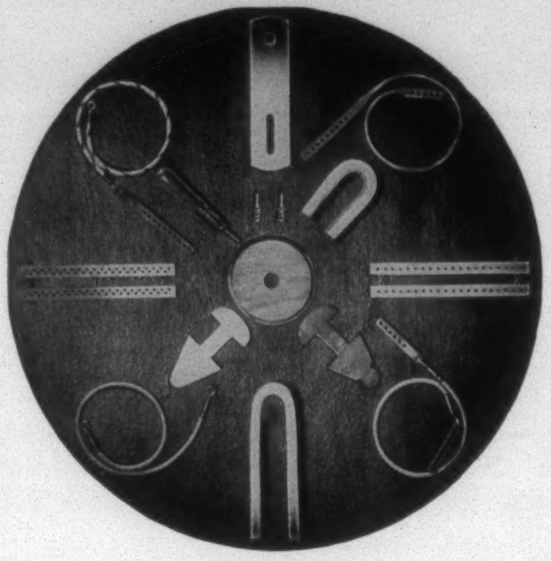

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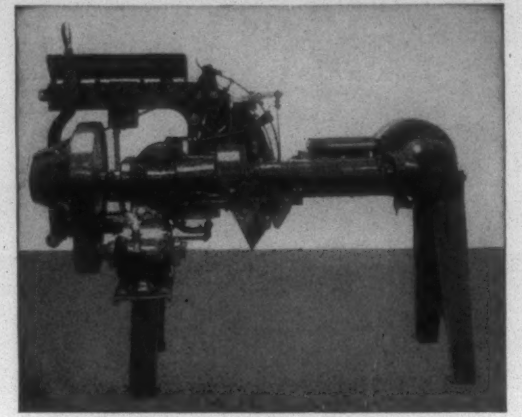

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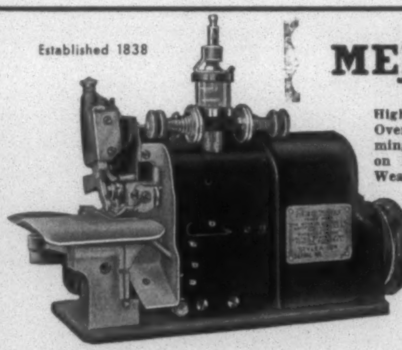

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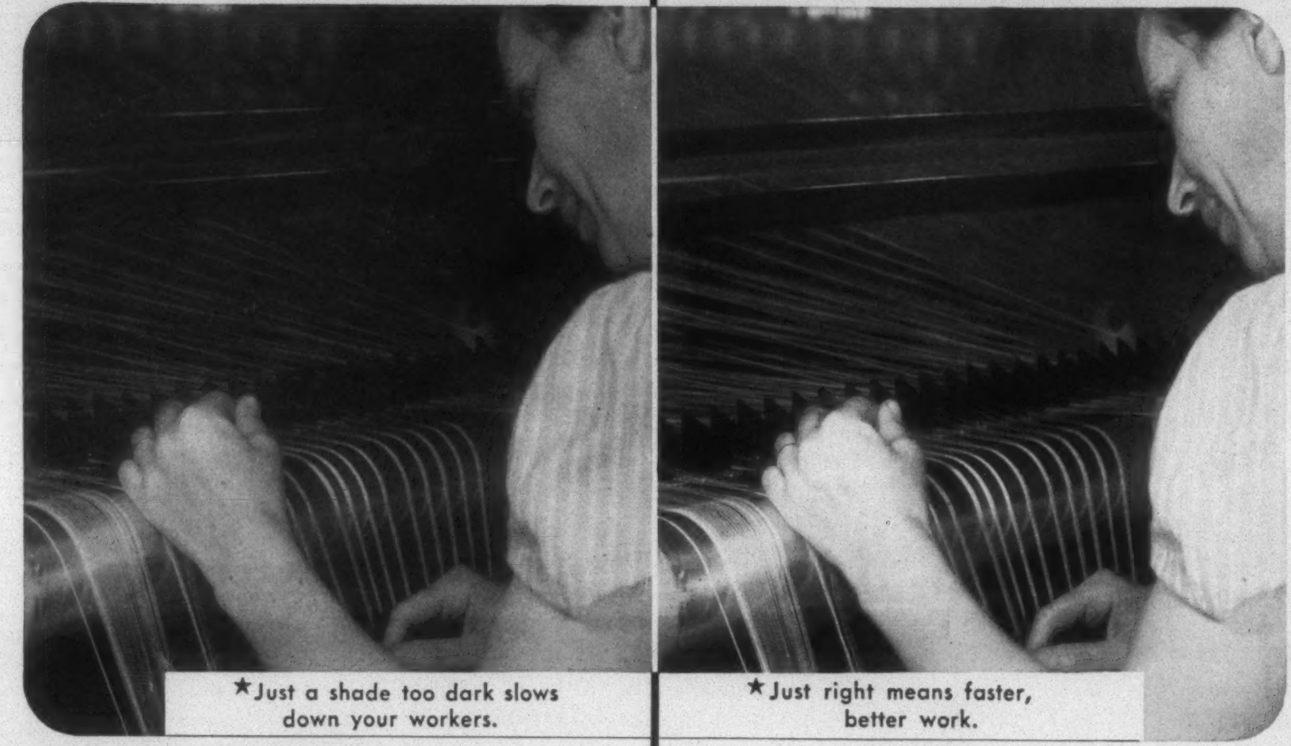

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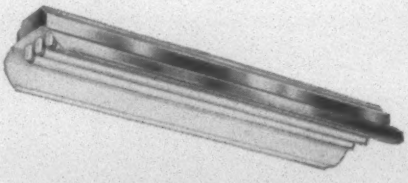

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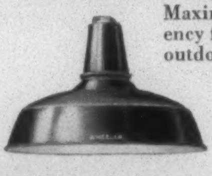

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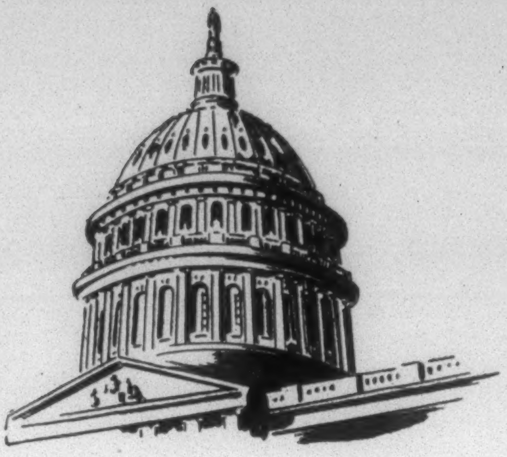

[Exclusive and Timely News from the Nation's Capital]

The pattern of new labor and strike-restricting legislation, which can be expected in finished form before the middle of 1947, is rapidly taking shape as Republican leaders decide upon their form of organization in the next Congress. The fact that after the coal strike, other strikes seem much less probable, is not having visible effect.

Every indication now points to the prospect of very comprehensive legislation that will revise the code of industrial relations, with the power of labor unions to close down the country or to tie up vital and strategic industries on the whim and caprice of their leaders going out at the window.

Public pressure for restrictions on the unions and their leaders is growing by the hour, and attested by the mail that is piling up on Congressional desks. Much of it is from union rank-and-file members, who ask for curbs on their leaders.

Republican leaders are demanding a three-member controlling majority on the four principal committees of the Senate in the coming session, but they will be content with a bare majority of one on the 11 remaining committees. The four major committees, as they are ranked in importance, are Education and Labor, Appropriations, Rules and Public Lands. The Republicans want 11 members of these committees, and would allow the Democrats eight members.

The center of the battle is around the Education and Labor Committee, which will be charged with reporting out labor legislation. In the last Congress this committee was strongly packed with New Deal adherents, some of whom were Republicans who voted as often with the Administration group as they did with their own partisans. On the outcome of the battle depends essentially the kind of labor and anti-strike legislation that will be reported to the Senate in the coming session.

Hold-over or re-elected Democrats who will remain on this committee are Senators Murray of Montana, Thomas of Utah, Pepper of Florida, Ellender of Louisiana, Hill of Alabama, Chavez of New Mexico; Johnston of South Carolina and Fulbright of Arkansas. If the ratio of 11 to eight is adopted, the Democratic contingent will consist of these eight members.

Under the preponderant weight of New Deal pressure, the committee voted out in the last session such bills as the 65 to 75-cent minimum wage bill, the Fair Employment Practices Bill, the $25 for 26 weeks idleness compensation bill, the nationalized health and medical bill, and a multitude of similar measures.

On the other hand, the committee scuttled the Case Labor Bill as it was passed by the House, and attempted to again bury the Hobbs Anti-Racketeering Bill as had been done in the previous Congress. The Petrillo Bill was reported out only when a majority of the Senate indicated that it would vote to discharge the committee from further consideration unless the measure was brought out.

In all recent sessions of Congress the Education and Labor Committee has been a graveyard in which was buried every piece of labor legislation that was passed by the House. The bill of Representative Smith of Virginia, to amend the Wagner Labor Relations Act and the initial version of the Smith-Connally Act, still rests in its pigeon holes.

The House-passed Case Bill was reported out, in wholly rewritten form, only after the Senate seemed determined to discharge the committee, and House leaders had indicated no more important legislation would be sent to the Senate until the Case Bill was out of the way.

Republicans claim that the fate of labor legislation is bound up in their demand for three extra members on the committee, and in this contention they are supported by several Southern senators. The new House leadership has indicated that it is tired of the committee being a graveyard for all House-enacted labor or strike legislation, and is insisting on a house cleaning.

A strong contingent of Administration Democrats, with some Republicans, in both the House and the Senate are urging that action on proposed labor legislation should be held up until the Supreme Court renders its decision in the appeal of John L. Lewis from the contempt citation ruling of Justice Goldsborough.

Senator Taft and other party leaders have declared their unwillingness to wait for this decision, and assert that it has little bearing on the broad objectives of proposed labor legislation. The Lewis matter, they say, is only one segment of a very wide and long program for revision of the industrial relations code.

In addition to reviving all of the provisions of the Truman-vetoed Case Bill, Senator Taft believes that these points should be covered in a new labor law program: (1) limitations on the closed shop; (2) a solution for or a ban on industry-wide strikes; (3) a ban on jurisdictional and sympathy strikes; (4) prohibition of strikes during the life of a wage contract; (5) cooling off periods in labor disputes, with provision for cooling off extensions; (6) adequate mediation machinery, with employers and employees on an equal footing; (7) financial accounting by labor unions; (8) consideration of incorporation and other responsibility features for labor unions, and (9) changes in the Wagner Labor Relations Act.

Whatever may be the fate of labor legislation, and in whatever form it may emerge from Congress, there are certain definite and controlling facts in the picture now. The first is that the great unorganized mass of people across the country are demandng much more drastic curbs on labor, and laws that are more restrictive, than Congress appears now to be willing to impose. Much of this pressure is arising from the Lewis coal strike.

Another strongly determinative factor is that the country has been shaken to its bed rock apparently by the coal strike, and a realization that by the first of the year, even with rationing and emergency controls, the nation would have been in a state of economic collapse, with unemployment approaching 15,000,000.

There's a protest, too, from the rank and file of union members. Many of them joined unions against their will during the war period, with continuance enforced upon them by maintenance-of-union provisions in wage contracts. They must obey the union leaders or lose their jobs. Lewis has the power to force any miner out of his union, and out of a job, who fails to obey his commands.

Some of the union members cite enormous losses in wages for the time lost in strikes that they did not want. This is especially true of workers who were caught in last winter's strike epidemic.

Estimates are that coal miners have lost in excess of $700 apiece in wages because of strike idleness in 1946, and the average loss of automobile workers, including idleness from strikes in plants making parts, is estimated at twice this sum.

Either way that the injunction case of Lewis goes in the Supreme Court, organized labor in the manner it has run its affairs since the end of the war is going to lose in this Congress. The right to strike is going to be sharply hedged with restrictions, and there will be curbs on the powers of union leaders to do as they please in calling strikes.

C. I. O., whose big unions are weakened from earlier strikes this year, fears a raid by John L. Lewis. Murray's treasury is weak, and he's not in position to wage a contest with Lewis now. Lewis knows Murray's desire to retire, and only waits the signal to invite dissident C. I. O. unions to join his catch-all District 50, which is not a district at all.

Members of Congress have reached the boiling point on strikes and work stoppages. Quietly, behind the scenes, Republican senators are working out a new industrial labor relations code, incorporating all strong provisions of the Case Bill, and permanently barring any strike in a government-operated industry.

New labor legislation will be designed to make all unions legally and financially responsible, and may require their incorporation, with public financial accountings. Labor leaders privately admit they are powerless to head off drastic legislation in the coming session.

Congress interprets the recent election as a mandate to pass strike-restricting legislation. With eye rubs and head scratching, organized labor is realizing it has overplayed its hand, and that it's unprofitable to take the unorganized masses by the throat and strangle them.

The strike epidemic of a year ago has become a Frankenstein, and big and uncontrolled labor, with ruthless power over workers and the public alike, plainly sees the handwriting on the wall. Congressional mail shows hardening public sentiment for drastic anti-strike legislation.

All war controls except on rents will go out at the window in the early stages of the new Congress. Heavy majorities against continuation prevail in both branches.

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